KISS

KALINGA INSTITUTE OF SOCIAL SCIENCES

CURRICULUM AND CREDIT FRAMEWORK FOR UNDERGRADUATE PROGRAMME

BACHELOR OF ARTS IN ECONOMICS

(As per NEP-2020, NCrF, NHEQF)

Academic Session 2025-2026



DEPARTMENT OF ECONOMICS

SCHOOL OF TRIBAL RESOURCE MANAGEMENT

KALINGA INSTITUTE OF SOCIAL SCIENCES (KISS)

DEEMED TO BE UNIVERSITY

Higher Education Campus, KISS Campus-3, Bhubaneswar, Odisha, 751024

https://university.kiss.ac.in | https://kiss.ac.in

SCHOOL OF TRIBAL RESOURCE MANAGEMENT

The School of Tribal Resource Management, KISS Deemed to be University, was established in 2017-18, to address the current and emerging rural development needs of the country and the inadequacy of homogeneous models of development. The School of Tribal Resource Management actively endeavors to equip its academic programme to measure up to the local, regional, national and international standards. It may be mentioned here that KISS Deemed to be University is the first full-fledged institution in the field of tribal resource management in the country. Here students receive quality education free of cost.

KISS is now determined to build on this advantage by creating a regular, organized and permanent framework to ensure that the knowledge and wisdom of yore is explored in depth scientifically for the lasting benefit of posterity. The establishment of a School of Tribal Resource Management is a step in this direction. The School has introduced three innovative interdisciplinary and multidisciplinary programmes namely Commerce, Economics and Geography, with a focus on Tribal Resource Management in the first phase with the approval of UGC to provide impetus to research in tribal resource management, tribal culture and tribal technology development. Besides implementing the Sustainable Development Goals of the United Nations, the School has succeeded in bringing about the tangible socio-economic changes in the tribal hinterland of Odisha and neighboring states.

Because of the School's commitment to helping tribal students develop their vocational, entrepreneurial and life skills, it strives to break the vicious circle of poverty and social isolation in which tribal communities find themselves trapped. The school also seeks to make tribal students aware that the people of their communities have a right to access varied indigenous resources and opportunities in order to live a self-sufficient, adequate and dignified life.

Department of Economics

The Department of [Economics], under the School of Tribal Resource Management (STRM), KISS Deemed to be University, established in [2017-18], addresses emerging academic, developmental, and societal needs through interdisciplinary and multidisciplinary programmes. The school strives to meet local, regional, national, and global standards while advancing tribal resource management, indigenous knowledge systems, and sustainable development.

Vision & Mission of the School

Vision

Emerge as an internationally acclaimed School recognized for excellence in teaching, research, consultancy, outreach, skill development, and social entrepreneurship, while promoting cultural heritage and diversity.

Mission

- Foster all-round development through multi-faceted education.
- Focus on sustainable resource management through innovative courses.
- Engage with communities to promote entrepreneurship and leadership.
- Manage resources effectively to create employment and self-employment opportunities.

Programme Overview

Programme Title:

[Name of Programme: Bachelor of Arts in Economics (TRM)

Programme Type:

Undergraduate / Honours / Honours with Research / Diploma / Certificate

Programme Description

A brief description of the programme, its interdisciplinary nature, relevance to tribal communities, integration of SDGs, and alignment with NEP-2020.

Process of Curriculum Development

All Schools shall follow the standard KISS-DU curriculum development protocol:

1. Formation of Syllabus Committee with domain experts.
2. Consultation with stakeholders (students, alumni, employers, community).
3. Review and approval by School faculty.
4. Vetting by Board of Studies (BoS) with external experts.
5. Final approval by the Academic Council.
6. Integration of NEP-2020, CBCS, NCrF, and NHEQF guidelines.

Definitions of Components

a) Ability Enhancement Courses (AEC): It refers to the courses enhancing competency in a Modern Indian Language (MIL) and in the English language with special emphasis on language and communication skills not literature, prose, poetry and novel etc.

b) Academic Bank of Credits (ABC): The ABC has been envisaged by the UGC to facilitate the academic mobility of students with the freedom to study across the HEIs in the country with an appropriate 'credit transfer' mechanism from one programme to another, leading to attain a Degree/Diploma/Certificate, etc.

c) Academic Year: Two consecutive semesters constitute one academic year.

d) Choice Based: The students select courses from the prescribed courses i.e., Major, Minor, Multidisciplinary, Ability Enhancement Course (AEC), Skill Enhancement Course (SEC), Value Added Course (VAC), Summer Internship/ Lab/Research.

e) Major is the subject of main focus.

f) Credit Based Semester System (CBSS): Under the CBSS, the requirement for awarding a degree/diploma/Certificate is prescribed in terms of the number of credits to be earned.

g) Credit: A unit by which the course work is measured. One credit is equivalent to one hour of lecture or tutorials or two hours of practical work/field work per week in a semester.

h) Minor Course helps a student to gain a broader understanding beyond the major discipline. The subjects mentioned in the minor (in the course structure table) will be offered only if a minimum of 10 students opt for that particular subject.

i) Multidisciplinary: It refers to the courses that a student can opt from other disciplines in order to broaden the intellectual experience.

j) Skills Enhancement Courses (SEC): It refers to the courses aiming at imparting practical skills, hands-on training, soft skills, etc., to enhance the employability of students.

k) Summer Internship/Apprenticeship/Summer Project: It refers to experiential exposure of a student. Summer Internship of 6-8 weeks duration after the completion of the fourth semester, followed by a project report and viva-voce examination during the fifth semester has been made compulsory to enable the students to have hands-on experience of real-life business situations.

l) Research has been provided in the Eighth semester (for students securing 7.5 CGPA or above) involving application of knowledge in exploring/critical analysis/solving issues related to a real-life situation.

m) Value Added Courses: It refers to the courses enabling the students to acquire and demonstrate the knowledge and understanding of contemporary society.

NCrF-Aligned Components (National Credit Framework)

1. Operational Definition of Credit (NCrF Standard)

"1 Credit = 30 Notional Learning Hours."

A standard 4-credit course = 120 Notional Learning Hours.

NCrF-Compliant Course Engagement Table

Component	Operational Definition	Hours (Example for 4-credit course)
Face-to-Face Lectures	Concept delivery, interactive instruction	45
Tutorials / Labs / Field	Hands-on practice, experimentation	30
Independent Self-Study	Pre-reading, journal review	20
Continuous Assessment	Assignments, quizzes, mid-term	12
Final Semester Exam Preparation	Revision, project completion	13
Total Notional Hours	**Must equal 30 hours × credits**	**120**

MOOC Courses (SWAYAM and SWAYAM Plus)

According to the UGC guidelines integrated into the new curriculum structures, Higher Education Institutions (HEIs) are permitted to allow students to take up to 40% of their total courses in a semester through the national MOOC platform, SWAYAM (or SWAYAM Plus for industry-aligned courses).

Credits earned via SWAYAM are mapped directly against the appropriate NHEQF academic level and digitally stored in the student's Academic Bank of Credits (ABC) to count toward their final degree, diploma, or certificate.

NCrF Category Wise Credit Distribution (UGC CCFUP Compatible) (for UG Programme)

Semester	Discipline Specific courses- core		Minor		MDC/IDC		AEC		SEC/ Internship/Dissertation		VAC		Grand Total Credits
	No. Of Papers	Total Credits	No. Of Papers	Total Credits	No. Of Papers	Total Credits	No. Of Papers	Total Credits	No. Of Papers	Total Credits	No. Of Papers	Total Credit	
I	1	4	1	4	1	3	1	2	1	3	4	8	20
II	1	4	1	4	1	3	1	2	1	3	2	4	20
III	2	8	1	4	1	3	1	2	1	3			20
IV	4	14	1	4			1	2					20
V	4	16	1	4					1	2			22
VI	4	16	1	4									20
VII	4	16	1	4									20
VIII	1	4	1	4					1	12			20
Total Credits for the Course		80		32		9		8		23		12	162

These exit awards correspond to progressive NHEQF / NSQF levels and are fully NCrF-compliant for credit accumulation, mobility and re-entry through the Academic Bank of Credits.

Skill Enhancement Courses (SEC), Multidisciplinary Courses (MDC), value-added courses and internships are creditised as per NCrF, recognizing vocational, experiential and community-based learning alongside academic coursework. These courses are designed at appropriate NSQF levels, with clear competency descriptors and notional hours.

vii. Eligibility for Admissions with No. of Seats

As per the admission guidelines and brochure of the KISS Deemed to be University.

viii. Examination Pattern for UG as per NEP 2020

The medium of examination is English which will be reflected in their final grade sheet/certificate.Provided that for a language subject answers are to be in that language. Sanskrit may be written inOdia scriptbutlanguagehastobeSanskrit.

DurationoftheExaminations-MidSemester&EndSemester:

Duration of examination for all term End examination shall be for 2.5 hours and for all Mid Term examinations for 1 hour irrespective of full marks in the course/subjects and irrespective of credit.The practicalexaminationsshallbeof2hoursduration.

EachSchoolshallhaveadesignatedfaculty as Examination Coordinator to be decided by the Vice Chancellor in addition to the Controller of Examinations of theUniversity.

ContinuousEvaluationandMidSemesterExamination:

a) Mid semester examination will be of 1-hour duration for20/10 marks (20 for subjects having no practical and 10 for subjects with practical papers). There shall be no pass mark inMid Semester examination.

b) The Mid-Semester Examination shall be conducted and valued by the Faculty who areteaching the corresponding paper. A student whofailstoappearinaMid-SemesterExamination**willbeallowedonemorechancetoo**take the same examination before appearing the concerned term-end examination. There will benoprovisiontore-appearinthe Mid-SemesterExaminationforimprovement.

c) For subjects with practicals there will be a Mid-Semester practical examination carrying 10marks.

d) The University authority of the valuation zones will preserve the answerScript of the End Semester examination for 06 months from the date of publication of the result for reference.

e) A studenthas to appear the mid semesterexamination positively.Absencein the midsemester examination will be considered as fail however the candidate may be allowed to appear the mid semester examination before commencement of the concerned Term-Endexamination under special case duly considered by the HoD (for the***candidateswhorepresenttheUniversityorStateforInter-Universityorinter-statecompetitionsin***

GamesandSportsor attendingdifferentrecognizedNationallevelcamps/any criticalmedicalcase dulycertifiedbythedesignatedmedicalofficer).

DistributionofMarksinEndSemester andContinuousEvaluation:

(Irrespectiveofcreditinacourse/Paper)

CourseType	Maximum Marks	Semester-Endtheory Mark	ContinuesEvaluationMarks /Sessional	MidSemester theory Mark	Semester-EndandPracticalmark	MidSemesterPracticalMark
Without Practical	**100**	**60**	**20**	**20**	**----**	**--**

With Practical	**100**	**50**	**10**	**10**	**20**	**10**
Thesis/ Dissertation/ Seminar/Field Work	**100**	**------**	**-------**	**-------**	**-------**	**-------**

The **modes of evaluation** of **Thesis/ Dissertation/ Seminar/Field Work** shall be as follows:

Literature Review
Synopsis Presentation
Field Work / Data Collection and Data Analysis
Findings and Conclusions
Presentation and Viva-Voce

DistributionofSessional Marks:(Continuous Evaluation)

CourseType	MaximumMark	MidSemester	Attendance	SurpriseTest/Quiz/Viva	Assignment/Presentation
WithoutPractical	**40**	**20**	**Above 95%-**	**10**	**05**
WithPractical	**30**	(Theory10+ Practical10)= 20	**5Marks 85%-94%-** **4Marks 75%-84%-** **3Marks**	**05**	**Nil**

ExaminationQuestionPatternofEnd Term Examination and Mark Distribution:

Theevaluationprocessmaycoversummativeandformativeaspectsand assessunderstandingapplications, articulation,programandcourseoutcome.

QuestionPattern		WithPractical	WithoutPractical
Part-I–Objective	**AnswerinMCQ/ in one word/in one sentence as directed**	**1x5=5**	**1x6=6**
Part-II-VeryShortType	**Answer within 50words. Answerany3 out of 5 questions (with practical) and answer any 5 out of 7 questions(without practical)**	**2x3=6**	**2x5=10**

Part-III-ShortType	**Answer within 250words Answerany3 out of 5 questions (with practical) and answer any 4 out of 6 questions(without practical)**	**5x3=15**	**5x4=20**
Part-IV-LongType	**Answer within 800words. Answerany3outof5 questions**	**8x3=24**	**8x3=24**
Total		**50**	**60**
ForPracticalPaper		**One MajorExperiment-10 Record- 05 Vivavoce-05**	---

ExaminationQuestionPatternofMid Semester Examination and Mark Distribution

QuestionPattern		**WithPractical**	**WithoutPractical**
Part-I–Objective	**AnswerinMCQ/ in one word/in one sentence as directed**	**1x3=3**	**1x6=6**
Part-II-VeryShortType	**Answer within 50words. Answerany1out of 2 questions (with practical) and answer any 2 out of 3 questions(without practical)**	**2x1=2**	**2x2=4**
Part-III-ShortType	**Answer within 250words Answerany1 out of 2 questions (with practical) and answer any 2 out of 3 questions(without practical)**	**5x1=5**	**5x2=10**
Total		**10**	**20**
ForPracticalPaper		**One MajorExperiment -5 Record- 02 Vivavoce-03**	---

ix. Attendance Requirement

Attendance in Lecturer, tutorials, seminars etc. arranged by the school from time to time, is mandatory according to the Internal Assessment requirement as per University rules.

The marks for attendance shall be as follows		
(i)	For 75%	1 Marks

(ii)	More than 75% but less than 80%	2 Marks
(iii)	80% or more but less than 85%	3 Marks
(iv)	85% or more but less than 90%	4 Marks
(v)	90% and above	5 Marks

Award of Degree:

A Degree certificate under the official seal of the university and signed by the Vice-Chancellor shall be presented at the Convocation or in absentia to each of the successful students of particular degree. The Controller of Examinations shall issue the mark/grade sheet of each semester to the candidates in the sheet of each semester to the candidates in the prescribed format.

Duration and Types of Courses and Process of Multiple Entry and Exit

NHEQF-Aligned Components (National Higher Education Qualifications Framework)

1. NHEQF Level Mapping for Multi-Entry / Multi-Exit

"This programme is structured according to the multi-entry, multi-exit parameters defined by UGC. The progressive qualification bands map directly onto the National Higher Education Qualifications Framework (NHEQF)."

Insert the following table:

Milestone / Year Completed	**Exit Award**	**NHEQF Level**	**Standard Credit Range**
Year 1 (Sem I–II)	UG Certificate	Level 4.5	~40 + 4 credits in work based vocational courses offered during summer term or internship / Apprenticeship in addition to 6 credits from skill-based courses earned during first and second semester.
Year 2 (Sem III–IV)	UG Diploma	Level 5.0	~80 + 4 credit in skill based vocational courses offered during first year or second year summer term
Year 3 (Sem V–VI)	UG Degree (3-Year)	Level 5.5	~120
Year 4 (Sem VII–VIII) **Year 1(Sem I-II)**	UG Honours / Honours with Research Post-Graduate Diploma	Level 6.0	~160
Year 2(Sem III-V)	Master's degree (e.g. M.A., M.Com., M.Sc., etc.)	Level 6.5	80 Credits
	Doctoral Degree	Level 8.0	Credits for coursework and, a thesis and published work

Programme Educational Objectives (PEO)

PEO1: Enable students to build successful careers in public/private sectors, entrepreneurship, or community development.

PEO2: Promote interdisciplinary and multidisciplinary learning and research.

PEO3: Develop entrepreneurial, analytical, and problem-solving skills.

PEO4: Prepare students for higher education, professional certifications, and research.

PEO5: Foster lifelong learning, ethical conduct, and social responsibility.

NHEQF-Aligned Programme Educational Objectives (PEOs)

*PEOs must describe achievements expected **5–6 years after graduation**, aligned to:*

- *Employability*
- *Entrepreneurship*
- *Research readiness*
- *Social responsibility*
- *Indigenous knowledge integration*

Programme Outcomes (PO)

(Aligned with NEP-2020 Graduate Attributes;)

PO1	Moral & Ethical Values	Commitment towards professional and intellectual integrity
PO2	Disciplinary Knowledge	Execute strong theoretical and practical understanding
PO3	Communication Skills	Communicate with society at large effectively
PO4	Critical Thinking, Problem solving & analytical reasoning	Analytical skills to design the solutions.
PO5	Indian Knowledge Systems (IKS)	Integrating modern economic concepts with the Indian Knowledge System to promote sustainable, ethical, and inclusive development.
PO6	Research-Related Skills	Build a sense of enquiry and able to formulate, test, analyse, interpret and establish hypothesis.
PO7	Cooperation/Teamwork	Understanding of group dynamics and contribute positively to collaborative-multidisciplinary management research.
PO8	Digital Literacy	Capability to use various technical ICT toolsfor exploring, analysing and using the information for business purposes of study, research and applications.
PO9	Experiential & Life – long learning	Recognize the need forhigh level of enthusiasm and commitment to improve knowledge and competence continuously.
PO10	Leadership Qualities	Leadership roles in their chosen occupations or careers and communities.

PO11	Professional & Decision-making Skills	Execute interpersonal relationships, self-motivation and adaptability skills and commit to professional ethics.
PO12	Environment Awareness and Sustainability	Life-long learning in the broadest context of socio-technological changes.

Programme Specific Outcomes (PSO)

PSO1: Students should be able to recall facts and understand the basic concepts of Micro and Macro Economics, Indian Economic Policy, International trade, Economics of Environment.
PSO2: : Interpret and analyse the information in emerging situations, execute and solve issues in the real field and demonstrate in their career.
PSO3: Connect among the areas of economic analysis, experiment and evaluate those ideas in real life situations with focus on life-cycle assessment approach.
PSO4:Students would be able to justify their stand, appraise, negotiate, defend, and support others views in their professional career.

Course Structure of the Undergraduate Programme

*(Economics Departments / Schools of Tribal Resource Management.)***Sem-I**

Course Category		Course Code	Course Title	Credits			Total Credit
				L	T	P	
CoreCourse(Major)		EC10001	Introductory Microeconomics	3	1	0	**4**
Minor(Choose any one or any other course from Arts or Science stream offered by university)	Geography	GO12001	Fundamental of Geomorphology	3	1	0	**4**
	Anthropology	AN12001	Fundamentals of Anthropology	3	0	1	4
	Education	ED12001	Introduction to Education	3	1	0	4
Multidisciplinary Course (MDC) (or any other course from Arts or Science stream offered by university)		CC13001	Financial Literacy	2	1	0	**3**
AbilityEnhancement Course (AEC) (Choose any one)		AE14001	Modern Indian Language (Odia)	2	0	0	2
		AE14003	Modern Indian Language (Hindi)	2	0	0	2

	AE14005	Modern Indian Language (Sanskrit)	2	0	0	2
	AE14007	Modern Indian Language (Santali)	2	0	0	2
	AE14009	Alternative English	2	0	0	2
Skill Enhancement Course (SEC) (Lab) or (any other course from Arts or Science stream offered by university)	SK15001	Statistics for Social Sciences	1	0	2	3
ValueAddedCourse	VA16201	Environment Education and Disaster Management	3	0	1	4
		Total				**20**

Semester-II

Course Category		**Course Code**	**Course Title**	**Credits**			**Total Credits**
				L	T	P	
Core Course (Major)		EC10002	Introductory Macroeconomics	3	1	0	4
Minor (Any One among List)	Management	MC12002	Business Environment	3	1	0	4
	Sociology	SO12002	Social Change in India	3	1	0	4
	Geography	GO12002	Fundamental of Geomorphology	3	1	0	4
	Psychology	PS12002	Developmental Patterns and Processes	3	0	1	4
	Anthropology	AN 12002	Growth of Anthropology in India	3	0	1	4
	Education	ED12002	Educational Psychology	3	1	0	4
Multidisciplinary (MDC)		CS13092	Data Analytics	2	0	1	3
Ability Enhancement Course (AEC)		AE14002	Translation studies (Odia)	2	0	0	2

	AE14004	Translation studies (Hindi)	2	0	0	2
	AE14006	Translation studies (Sanskrit)	2	0	0	2
	AE14008	Translation studies (Santali)	2	0	0	2
	AE14010	Translation studies (English.)	2	0	0	2
Skill Enhancement Course (SEC)	SK15002	Career Orientation Skill	2	0	1	3
Value Added Course (VAC) (Choose any one)	VA16124	Enhancement of Active Citizenship and Democratic Values	2	0	0	2
	VA16134	Inclusive Education and Gender Equality	2	0	0	2
	VA16142	Combating Radicalism through Education	2	0	0	2
	VA16146	Indian Knowledge System	2	0	0	2
	VA16394	Flutter Application Development	1	0	1	2
Value Added Course (VAC) (Choose any one)	VA16422	Human Values and Professional Ethics	2	0	0	2
	VA16430	Life Skills Education	2	0	0	2
	VA16482	Self -help and Happiness	2	0	0	2
	VA16484	Community Engagement and Social Responsibility	2	0	0	2
	VA16486	Pioneering Service Learning and Community	2	0	0	2
	VA16488	Sports and Yoga	2	0	0	2
		Total				**20**

Semester-III

Course Category	**Course**	**Course Title**	**Credit**	**Total**

		Code		L	T	P	Credit
Core Course (Major)		EC21001	Mathematical Methods for Economics	3	1	0	4
		EC21003	Statistical Methods for Economics	3	1	0	4
Minor (Any One among the List)	Management	MC22001	Principles of Rural Marketing	3	1	0	4
	Sociology	SO22001	Social Stratification and Mobility	3	1	0	4
	Geography	GO22001	Climate Science	3	1	0	4
	Psychology	PS22001	Introduction To Cognitive and Behavioural Sciences	3	0	1	4
	Anthropology	AN22001	Applied and Action Anthropology	3	0	1	4
	Education	ED22001	Trends and Issues in Education	3	1	0	4
Multidisciplinary (MDC)		CS23001	Introduction to AI and ML	2	0	1	3
Ability Enhancement Course (AEC)		AE24001	Communicative English	2	0	0	2
Skill Enhancement Course (SEC)		EC25001	Elementary Computer Application in Presentation of Data	2	0	1	3
			Total				**20**

Semester-IV

Course Category	Course Code	Course Title	Credit			Total Credit
			L	T	P	
Core Course (Major)	EC20002	Advanced Microeconomics	3	1	0	4

		EC20004	Advanced Macroeconomics	3	1	0	4
		EC20006	Money& Banking: Theory& Practice	3	1	0	4
Minor (Any One among the List)	Management	MC22002	Tribal Entrepreneurship and Startup Development	3	1	0	4
	Sociology	SO22002	Sociology of Education	3	1	0	4
	Geography	GO22002	Climate Science	3	1	0	4
	Psychology	PS22002	Understanding Psychological Disorder	3	0	1	4
	Anthropology	AN22002	Anthropology of Art and Culture	3	0	1	4
	Education	ED22002	Education in Tribal Society	3	1	0	4
Ability Enhancement Course		AE24002	Professional Communication	2	0	0	2
LAB		SE20082	Seminar	0	0	2	2
			Total				20

Exit Point: Undergraduate Diploma Students exiting the programme after securing80credits will be awarded a UG Diploma in the relevant Discipline /Subject provided they secure an additional 4credits in skill-based vocational courses offered during the first year or second year

Semester-V (Single Major)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course (Major)		EC30001	International Economics	3	1	0	4
		EC30003	Public Economics	3	1	0	4
		EC30005	Indian Economy: Policies&Performances	3	1	0	4
		EC30007	Digital Economy and Data Analytics	3	1	0	4
Minor(	Management	MC32001	Human Resource	3	1	0	4

Any One among the List)			Management				
	Sociology	SO32001	Social Problems in India	3	1	0	4
	Geography	GO32001	Geography of India	3	0	1	4
	Psychology	PS32001	Psychology In Tribal Educational Setting	3	0	1	4
	Anthropology	AN32001	Anthropology and Tribes of India	3	0	1	4
	Education	ED32001	Contemporary Concerns in Education	3	1	0	4
Internship		IP37081	Internship	0	0	2	2
			Total				22

Semester-V (Double Major)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course (Major)		EC30001	International Economics	3	1	0	4
		EC30003	Public Economics	3	1	0	4
		EC30005	Indian Economy: Policies&Performances	3	1	0	4
		EC30007	Computer Application for Economic Analysis	3	1	0	4
Minor/ Double Major (Choose any One or any other course from Arts or Scienc	Management	MC32001	Human Resource Management	3	1	0	4
		MC32003	Operations Management	3	1	0	4
		MC32005	Retail Management	3	1	0	4
		MC32007	Tourism and Hospitality Management	3	1	0	4
	Sociology	SO32001	Social Problems in India	3	1	0	4
		SO32003	NGO Management	3	1	0	4

e Stream offered by University		SO32005	Sociology of Religion	3	1	0	4
		SO32007	Gender Sensitization	3	1	0	4
	Geography	GO32002	Geography of India	3	0	1	4
		GO32003	Development of Geography	3	1	0	4
		GO32005	Cartography Techniques	3	1	0	4
		GO32007	Tourism Geography	3	1	0	4
	Psychology	PS32001	Psychology In Tribal Educational Setting	3	0	1	4
		PS32003	Psychological Assessment-I	3	0	1	4
		PS32005	Psychology of Crime	3	0	1	4
		PS32007	Psychology of Disability	3	0	1	4
	Anthropology	AN32001	Anthropology and Tribes of India	3	0	1	4
		AN32003	Human Ecology and Bio-cultural Adaptation	3	0	1	4
		AN32005	Anthropological Genetics	3	0	1	4
		AN32007	Fundamentals of Religion, Politics and Economy in Anthropology	3	0	1	4
	Education	ED32001	Contemporary Concerns in Education	3	1	0	4
		ED32003	Introduction to Education	3	1	0	4
		ED32005	Educational Psychology	3	1	0	4
		ED32007	History of Education in India	3	1	0	4
Internship		IP37081	Internship	0	0	2	2
			Total				34

Semester-VI (Single Major)

Course Category	Course Code	Course Title	Credit			Total Credit
			L	T	P	

Core Course(Major)		EC30002	Environmental Economics	3	1	0	4
		EC30004	Development Economics	3	1	0	4
		EC30006	Agricultural Economics	3	1	0	4
		EC30008	Introductory Econometrics	3	1	0	4
Minor(Any One among the List)	Management	MC32002	Stock Market Operations	3	0	1	4
	Sociology	SO32002	Sociology of Tribes	3	1	0	4
	Geography	GO32002	Geography of India	3	0	1	4
	Psychology	PS32002	Child Psychology	3	0	1	4
	Anthropology	AN32002	Medical Anthropology	3	0	1	4
	Education	ED32002	History, Politics and Economics of Education	3	1	0	4
			Total				20

Exit Point :Bachelor's Degree with Hons.
StudentswhowanttoundertakeA3yearUGprogrammewillbeawardedaUGDegreeinthere relevantDiscipline/Subject uponsecuring120credits

Semester-VI (Double Major)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
CoreCourse(Major)		EC30002	Environmental Economics	3	1	0	4
		EC30004	Development Economics	3	1	0	4
		EC30006	Agricultural Economics	3	1	0	4
		EC30008	Introductory Econometrics	3	1	0	4
Minor(	Management	MC32002	Stock Market	3	0	1	4

AnyOne among the List)			Operations				
		MC32004	Customer Relationship Management	3	1	0	4
		MC32006	Digital Marketing	3	1	0	4
		MC32008	Wealth Management	3	1	0	4
	Sociology	SO32002	Sociology of Tribes	3	1	0	4
		SO32004	Gender and Violence	3	1	0	4
		SO32006	Social Welfare and Administration	3	1	0	4
		SO32008	Tribal Problems in India	3	1	0	4
	Geography	GO32092	Vulnerability Mapping in Geography	3	0	1	4
		GO32004	Geography of Health and Well-Being	3	1	0	4
		GO32006	Hydrology	3	1	0	4
		GO31308	Digital Cartography and Mapping	3	1	0	4
	Psychology	PS32002	Child Psychology	3	0	1	4
		PS32004	School Psychology	3	0	2	4
		PS32006	Psychological Applications	3	0	2	4
		PS32008	Psychological Assessment-II	3	0	2	4
	Anthropology	AN 32002	Medical Anthropology	3	0	2	4
		AN 32004	Tribal Demography	3	0	2	4
		AN 32006	Anthropology of Material Culture	3	0	2	4
		AN 32008	Gender Studies in Anthropology	3	0	2	4
	Education	ED-32002	History, Politics and Economics of Education	3	1	0	4
		ED32004	Open and Distance	3	1	0	4

			Learning				
		ED32006	Education in Tribal Society- Formal, Informal and Non-Formal	3	1	0	4
		ED32008	Guidance and Counselling	3	1	0	4
			Total				32

Semester-VII (Single Major)

(Without Research / With Research)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course (Major)		SR40001	Social Research Methods	3	1	0	4
		EC40003	Financial Institution and Market	3	1	0	4
		EC40005	Welfare Economics	3	1	0	4
		EC40007	Industrial Economics	3	1	0	4
Minor(Any One among the List)	Management	MC42091	Behavioural Finance	3	0	2	4
	Sociology	SO42001	Rights of Indigenous People	3	1	0	4
	Geography	GO42001	Population Geography	3	0	2	4
	Psychology	PS42001	Psychosocial studies in tribal society	3	0	2	4
	Anthropology	AN42001	Fashion and Visual Anthropology	3	0	2	4

	Education	ED42001	Teacher Education	3	1	0	4
			Total				20

Semester-VII (Double Major)

(Without Research / With Research)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course(Major)		SR40001	Social Research Methods	3	1	0	4
		EC40003	Financial Institution and Market	3	1	0	4
		EC40005	Welfare Economics	3	1	0	4
		EC40007	Industrial Economics	3	1	0	4
Minor/ Double Major (Choose any One or any other course from Arts or Science Stream offered by University	Management	MC42091	Behavioural Finance	3	0	2	4
		MC42003	Performance Management	3	1	0	4
	Sociology	SO42001	Rights of Indigenous People	3	1	0	4
		SO42003	Sociology of Entrepreneurship	3	1	0	4
	Geography	GO42091	Urbanization and Urban Planning in Odisha	3	0	2	4
		GO41303	Bio Geography	3	1	0	4
	Psychology	PS42001	Psychosocial Studies in Tribal Society	3	0	2	4
		PS42003	Indian Psychology & Indigenous Studies	3	0	2	4
	Anthropology	AN42001	Fashion and Visual Anthropology	3	0	2	4
		AN42003	Anthropology of Museum and Cultural Resource Management	3	0	2	4

	Education	ED42001	Teacher Education	3	1	0	4
		ED42003	Philosophy of Education	3	1	0	4
\			Total				24

Semester-VIII (Single Major) (7.5 CGPA)

(Without Research)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course (Major)		EC40002	Applied Econometrics	3	1	0	4
		EC40004	Labour Economics	3	1	0	4
		EC40006	Economic of Health and Education	3	1	0	4
		EC40008	Odisha Economy	3	1	0	4
Minor (Any One among the List)	Management	MC42002	Sustainable Finance	3	1	0	4
	Sociology	SO42002	Rural Sociology and Rural Development	3	1	0	4
	Geography	GO42002	Population Geography	2	0	4	4
	Psychology	PS42002	Understanding Human Thought Processes	3	0	2	4
	Anthropology	AN42002	Recent Trends in Anthropology	3	0	2	4
	Education	ED42002	Global Citizenship Education	3	1	0	4
			Total				20

Semester-VIII (Double Major)

(Without Research)

Course Category	Course Code	Course Title	Credit			Total Credit
			L	T	P	

Core Course(Major)		EC40002	Applied Econometrics	3	1	0	4
		EC40004	Labour Economics	3	1	0	4
		EC40006	Economic of Health and Education	3	1	0	4
		EC40008	Odisha Economy	3	1	0	4
Minor (Any One among the List)	Management	MC42002	Sustainable Finance	3	1	0	4
		MC42004	Human Resource Planning	3	1	0	4
	Sociology	SO42002	Rural Sociology and Rural Development	3	1	0	4
		SO42004	Sociology of Environment	3	1	0	4
	Geography	GO42002	Fundamental	2	0	2	4
		GO42004	Geo Politics	3	1	0	4
	Psychology	PS42002	Understanding Human Thought Processes	3	0	2	4
		PS42004	Psychological Assessment	3	0	2	4
	Anthropology	AN42002	Recent Trends in Anthropology	3	0	2	4
		AN42004	Anthropology of Education	3	0	2	4
	Education	ED42002	Global Citizenship Education	4	0	0	4
		ED2004	Research Ethics and Academic Writing				
			Total				24

Semester-VIII (Single Major)

(With Research)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course(Major)		EC40002	Applied Econometrics	3	1	0	4
Minor(Any One among Three)	Management	MC42002	Sustainable Finance and Investment	3	1	0	4
	Sociology	SO42002	Rural Sociology and Rural Development	3	1	0	4
	Geography	GO42002	Population Geography	3	0	1	4
	Psychology	PS42002	Understanding Human Thought Processes	3	0	1	4
	Anthropology	AN42002	Recent Trends in Anthropology	3	0	1	4
	Education	ED42002	Global Citizenship Education	3	1	0	4
Research		RD40082	Research and Dissertation	0	0	12	12
			Total				20

Semester-VIII (Double Major)

(With Research)

Course Category		Course Code	Course Title	Credit			Total Credit
				L	T	P	
Core Course(Major)		EC40002	Applied Econometrics	3	1	0	4
Minor (Any One among the List)	Management	MC42002	Sustainable Finance	3	1	0	4
		MC42004	Human Resource Planning	3	1	0	4
	Sociology	SO42002	Rural Sociology and Rural Development	3	1	0	4

		SO42004	Sociology of Environment	3	1	0	4
	Geography	GO42092	Fundamental of Remote Sensing and GIS	2	0	4	4
		GO41304	Geo Politics	3	1	0	4
	Psychology	PS42002	Understanding Human Thought Processes	3	0	2	4
		PS42004	Organizational Behaviour	3	0	2	4
	Anthropology	AN42002	Recent Trends in Anthropology	3	0	2	4
		AN42004	Anthropology of Education	3	0	2	4
	Education	ED2002	Global Citizenship Education	3	1	0	4
		ED42004	Comparative Education	3	1	0	4
Research		RD48092	Dissertation and Viva Voce	0	0	24	12
			Total				24

Grand Total: **Single Major-162**Credits**, Double Major-194 Credits**

Exit Point: Bachelor's Degree with Hons. And Research Students will be awarded UG Degree (Honours)with Research in theirrelevant Discipline/Subjectprovidedtheysecure160 credits Honoursstudentsnotundertakingresearchwilldo3coursesfor12creditsinlieuofaresearchproject/Dissertation.
Grand Total: **Single Major-162 Credits, Double Major-194 Credits**

Course Structure (Semester-wise)

(Schools will list courses in the following format.)

Semester I

Code	Course Title	Credit	L-T-P
EC10001	Introductory Microeconomics	4	3-0-1

Course Learning Objectives:

This course is designed to provide students with an understanding of the introductory topics in the field of consumer behaviour, production, costs, markets, and distribution.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes (Cos): On successful completion of the course, the students will be able to:

CO1:Knowledge/Remember): Learn the basic principles of supply, demand and their interactions.

CO2: (Understanding): Understand the concepts of consumer equilibrium with respect to cardinal and ordinal approaches.

CO3: (Application): Evaluate the concept of production and cost of the firm and producer's equilibrium.

CO4:(Analysis): Identify the forms of perfect and imperfect markets.

CO5:(Synthesis/Evaluation): Analyse different theories of distribution.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs/ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1
CO2	2	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1
CO3	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	2
CO4	2	3	3	3	3	2	2	2	2	2	2	1	2	3	2	2
CO5	2	3	2	3	3	2	1	1	2	1	2	1	3	3	3	2
Avg.	1.8	3.0	2.2	2.8	2.8	1.8	1.2	1.6	2.0	1.2	1.8	1.0	2.8	2.8	2.0	1.6

Course Inputs:

UNIT-I Concepts of Microeconomics (12 Lecture)

Basic economic Problems; Concepts of demand and supply: Demand function and inverse demand function, determinants of individual demand/supply, demand/supply schedule and derivation of individual and market demand/supply curves; Law of demand and law of supply; Exceptions of Law of demand and supply; Shifting of and movement along the demand/supply curve; Elasticity of demand and supply: Types and applications.

UNIT-II Consumer Behaviour (12 Lecture)

Meaning and characteristics: Cardinal and ordinal utility analysis; Measurement of utility; Total utility and marginal utility; Law of diminishing marginal utility; Law of equi-marginal utility; Critical evaluation of cardinal utility analysis; Indifference curve approach: Assumptions, properties of indifference curve, marginal rate of substitution; Budget constraints and price line; Consumer's equilibrium; Consumer surplus.

UNIT-III Production, Cost and Revenue (12 Lecture)

Production possibility frontier (PPF); Production function: Short-run and long-run; Isoquants; Marginal rate of technical substitution; Product line; Iso-cost line; Producer's equilibrium; Law of variable proportion; Law of returns to scale; Economies and diseconomies of scale; Cost concepts: Short-run and long run cost curves; Expansion path; Theory of the firm: Profit maximization; Revenue concepts: Total, marginal, and average revenue; Break-even point.

UNIT-IVMarket Structure (12 Lecture)

Meaning, function, and types of market structure; Price and output determination under perfect competition; Role of time element; Monopoly: Price and output determination in Short-run and long-run; Comparison between monopoly and perfect competition.

UNIT-V Theories of Distribution (12 Lecture)

Marginal productivity theory of distribution; Ricardian theory of rent; Quasi rent; Modern theory of rent; Transfer earning and economic rent; Classical theory of interest; Loanable fund theory of interest; Liquidity preference theory; Gross and net profit.

Recommended Learning Resources

- **Textbooks:**

1. Koutsoyiannis, A. (2023), Modern Microeconomics, 2nd Edition, Macmillan Education, UK.
2. Dwivedi, D.N. (2023), Microeconomics: Theory and Application, Latest Edition, Vikas Publishing House, New Delhi.
3. Snyder and W. Nicholson (2012) Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage learning, New Delhi.
4. Varian, H.R. (2020), Intermediate Microeconomics: A Modern Approach, 8th Edition, WW Norton & co, New York.

Suggested Readings:

1. Ahuja, H.L. (2017), Advanced Economic Theory: Microeconomic Analysis, 21st Edition, S Chand & Company, New Delhi.

2.Mankiw, N.G. (2018), Principles of Microeconomics, 8th Edition, Cengage Learning, Delhi.

3.https://youtu.be/ijHvcQFdBBU

Notes: Latest Edition of the textbook should be used.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Enhances conceptual and analytical understanding of microeconomic principles
SDG 8	Decent Work and Economic Growth	Develops understanding of markets, production and economic growth
SDG 10	Reduced Inequalities	Promotes understanding of income distribution and welfare economics
SDG 12	Responsible Consumption and Production	Encourages efficient resource allocation and sustainable consumption behavior

Minor Course:

Code	Course Title	Credit	L-T-P
EC12001	Principles of Microeconomics	4	3-1-0

Course Learning Objectives:

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic problems of economy.

CO2: Understand the concept of demand and supply and their interaction.

CO3: Evaluate the concept of laws of consumption.

CO4: Analyze the theories of production function.

CO5: Identify the forms of perfect and imperfect market.

CO PO Mapping Table

Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs/ Pos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1

CO2	2	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1
CO3	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	2
CO4	2	3	3	3	3	2	2	2	2	2	2	1	2	3	2	2
CO5	2	3	2	3	3	2	1	1	2	1	2	1	3	3	3	2
Avg.	1.8	3.0	2.2	2.8	2.8	1.8	1.2	1.6	2.0	1.2	1.8	1.0	2.8	2.8	2.0	1.6

Course Inputs:

UNIT-I Exploring the subject matter of Economics (12 hours)

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output.

UNIT-II Supply and Demand (12 Hours)

Demand/supply; Individual schedule and law of demand/supply curve; shifts in the Demand/supply curve, demand and supply together; elasticity of demand and its application; (price, income and cross) Consumer surplus.

UNIT-III Consumption Decision (12hours)

Utility Analysis, Laws of consumption, description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer 's **optimum choice; income and substitution effects**

UNIT-IV Production Function (12 hours)

Theory of costs- TC, AC and MC, short run costs and long run costs. Revenue concept-TR, AR and MR. Short run production function and law of variable proportions.

UNIT-V Perfect and Imperfect Market Structure (12hours)

Types of market; Price and output determination under Perfect Competition and Monopoly market structure-features and comparison.

Textbooks:

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Enhances conceptual and analytical understanding of microeconomic principles

SDG 8	Decent Work and Economic Growth	Develops understanding of markets, production and economic growth
SDG 10	Reduced Inequalities	Promotes understanding of income distribution and welfare economics
SDG 12	Responsible Consumption and Production	Encourages efficient resource allocation and sustainable consumption behavior

Multidisciplinary Course (MDC)

Code	Course Title	Credit	L-T-P
CC13001	Financial Literacy	3	2-1-0

Ability Enhancement course (AEC)

Code	Course Title	Credit	L-T-P
AE14001	Translation Studies (Odia)	2	2-0-0

Refer to Department of Odia, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14003	Translation Studies (Hindi)	2	2-0-0

Refer to Department of Hindi, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14005	Translation Studies (Sanskrit)	2	2-0-0

Refer to Department of Sanskrit, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14007	Translation Studies (Santhali)	2	2-0-0

Refer to Department of Santali, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14009	Alternative English (English)	2	2-0-0

Refer to Department of English, School of Comparative Tribal Languages and Literatures, KISS-DU

AEC-I

Alternative English

Course Code: AE14009

Refer to the Department of English (SCTLL)

Course Objectives:

- Develop critical reading and analytical skills through the study of prose, poetry, and short fiction.
- Understand myriad literary forms, themes, and stylistic features of English literature of different cultural and historical contexts.
- Enhance appreciation of literary texts by examining human core values, ethics, social issues, and aesthetic expression.
  · Sharpen English language proficiency through the study and practice of grammar, vocabulary, comprehension, and writing skills.
- Refine communication skills, enabling students to express ideas effectively in both written and spoken English.

Course Outcomes:

Analyze and interpret prose, poetry, and short fiction by identifying their themes, literary techniques, and cultural significance.

· Evaluate the ideas and perspectives presented in literary texts and relate them to contemporary social, ethical, and human concerns.

· Demonstrate an understanding of major literary forms, including essays, short stories, sonnets, and modern poetry.

· Apply the rules of English grammar, including tenses, articles, prepositions, subject–verb agreement,
and sentence transformations, in effective communication.

· Develop proficiency in reading comprehension, précis writing, and coherent written expression for academic and professional contexts.

Course Contents:

Unit I: Prose

- Francis Bacon- *Of Studies, Of Truth*
- A. P. J. Abdul Kalam – *My Vision for India*

Unit II: Short Fiction

- O. Henry – *The Gift of the Magi*
- *Mahasweta Devi –* ***Draupadi*** (translated by Gayatri Chakravorty Spivak)

Unit III: Poetry

- William Shakespeare – *Sonnet 116, 138*
- Jayanta Mahapatra – *Hunger*

Unit IV: Language and Communication Skills

- Tenses, Articles, Prepositions, Subject–Verb Agreement Transformation of Sentences (Active–Passive, Direct–Indirect) Comprehension and Precis Writing

Course Outcomes - Programme Outcomes Mapping of Paper

CO ↓ / PO →	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	2	3	2	2	1	2	2	1	2	2
CO2	3	3	3	3	3	2	2	2	2	1	2	3
CO3	2	3	3	3	3	3	2	3	3	2	3	3
CO4	2	3	2	3	3	2	2	2	3	2	3	3
CO5	2	3	3	3	2	2	2	2	2	3	2	3

1 = Weakly Mapped (Low), 2 = Moderately Mapped (Medium),
3 = Strongly Mapped (High), "–" = There is No correlation

Course Outcomes – Programme Specific Outcomes (PSOs) Mapping of Paper

CO ↓ / PSO →	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	2	2
CO2	3	2	3	3	2
CO3	3	3	3	3	3
CO4	3	3	2	3	3
CO5	3	3	3	3	3

1 = Weakly Mapped (Low), 2 = Moderately Mapped (Medium),
3 = Strongly Mapped (High), "–" = There is No correlation

Mapping with Cross-cutting Issues

Cross-cutting Issue	Level of Integration	Illustrative Components
Professional Ethics	High	Ethical communication, academic integrity, and values reflected in texts such as A. P. J. Abdul Kalam's writings
Gender	Medium–High	Representation of gender, marginalization, and identity in Draupadi
Human Values	High	Compassion, sacrifice, morality, patriotism, and empathy reflected in works by O. Henry and Jayanta Mahapatra
Environment & Sustainability	Medium	Social awareness, human survival, poverty, and ecological sensitivity reflected in literary texts

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Enhances literary competence, grammar, communication, and critical thinking skills
SDG 5	Gender Equality	Encourages critical engagement with gender representation and women's experiences
SDG 8	Decent Work & Economic Growth	Strengthens language proficiency and professional communication skills
SDG 10	Reduced Inequalities	Promotes empathy, inclusion, and understanding of marginalized communities
SDG 16	Peace, Justice & Strong Institutions	Encourages ethical values, cultural awareness, and responsible communication

Recommended Learning Resources

- Bacon, Francis. *Essays of Francis Bacon* (Oxford World's Classics or Penguin Classics), 1625.
- Kalam, A. P. J. Abdul. *Wings of Fire* and *My Vision for India: Ideas for the New Millennium.* (Universities Press / Penguin India),1999.
- O. Henry. *The Gift of the Magi and Other Stories.* (Signet Classics / Dover Publications), 1906.
- Devi, Mahasweta. *Breast Stories.* Translated by Gayatri Chakravorty Spivak. (Seagull Books, Kolkata), 2002.
- Mahapatra, Jayanta. *A Rain of Rites: Poems.* (Oxford University Press / Harper Collins India), 1976**.**
- Shakespeare, William. *Sonnets.* (Edited by Katherine Duncan-Jones, Arden Shakespeare Series / Oxford University Press), 1997.
- Ram, M. & Singh, K. *English Language and Communication Skills: A Practical Approach.* (PHI Learning / Cambridge India), 2012.
- Iyengar, K. R. Srinivasa. *Indian Writing in English.* (Sterling Publishers / Asia Publishing House),1962.
- Parija, Ratnaprava. Communicative English (REST Publisher, Tamil Nadu), 2018.
- Murphy, Raymond. *English Grammar in Use.* (Cambridge University Press),1985.

SEC: Skill Enhancement Course

Code	Course Title	Credit	L-T-P
SK15001	Statistics for Social Sciences	3	2-0-1

Course Objectives

This course aims to provide students with a fundamental understanding of statistical concepts, data collection methods, and data presentation techniques. It also develops the ability to apply basic statistical tools, including measures of central tendency and dispersion, for analysing and interpreting geographical and social science data.

Course Outcomes (COs): After successful completion of the course, students will be able to:

CO1 Explain the basic concepts, functions, scope, importance, and limitations of Statistics and identify different sources of statistical data.

CO2 Collect, organize, classify, and present data using tabular, diagrammatic, and graphical techniques such as bar diagrams, pie charts, histograms, frequency polygons, and ogives.

CO3 Distinguish between census and sampling methods and evaluate their merits, demerits, and practical applications in statistical studies.

CO4 Calculate and interpret measures of central tendency including Arithmetic Mean, Median, Mode, Harmonic Mean, and Geometric Mean.

CO5 Compute and analyse absolute and relative measures of dispersion such as Range, Quartile Deviation, Mean Deviation, and Standard Deviation for statistical interpretation.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1:	1	3	2	2	2	1	1	2	2	1	1	1	3	2	1	1
CO2:	1	3	2	3	3	2	1	2	2	1	2	1	2	3	2	1
CO3:	1	3	2	2	3	1	1	2	2	1	2	1	3	2	2	1
CO4:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1
CO5:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	3	2
Avg	1	3	2	2,6	2.8	1.6	1	2	2	1	1.8	1	2.8	2.6	2	1.2

Course Inputs:

UNIT-I Conceptual Framework of Statistics (10 Lectures)

Meaning, Functions, Scope, Importance and limitations of Statistics, Sources of Statistical data- Primary data and secondary data, Methods of primary data collection.

UNIT-II Frequency Distribution (8 Lectures)

Organization of Data, Presentation of data-Tabular and diagrammatic Presentation, Bar-diagram, Pie diagram, Histogram, Frequency polygon, Ogives.

UNIT-III Sampling Methods (6 Lectures)

Census and Sampling methods and their relative merits & demerits, Partial and Complete enumeration.

UNIT-IV Statistical Methods (10 Lectures)

Measures of Central tendency: Arithmetic Mean, median and mode. Harmonic mean and Geometric mean.

UNIT- V Measures of Dispersion (10 Lectures)

Absolute Measures: Range, Quartile deviation, Mean deviation and Standard deviation. Relative Measures- Coefficient of Range, Quartile deviation, Mean deviation and Standard deviation.

Recommended Learning Resources

Textbooks:

1. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson

Education, 6th edition, 2009.

2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial

Markets and Institutions, Pearson Education, 3rd edition, 2009.

3. M. R. Baye and D. W. Jansen, Money, Banking and Financial Markets, AITBS, 1996.

Suggested readings

Rakesh Mohan, Growth with Financial Stability- Central Banking in an Emerging

Market, Oxford University Press, 2011.

https://youtu.be/NCIb69nO8MM

Notes: Latest Edition of the textbook should be used.

SDG Mapping for this Course:

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	The course develops quantitative, analytical and research-oriented skills through statistical methods, data analysis and interpretation, thereby enhancing quality higher education and lifelong learning competencies.

SDG 8	Decent Work and Economic Growth	Statistical tools such as sampling, correlation and probability support business analysis, economic forecasting and informed decision-making, improving employability and professional competence.
SDG 9	Industry, Innovation and Infrastructure	The course promotes scientific and data-driven approaches useful in research, innovation, economic planning and technological applications in business and industry.
SDG 12	Responsible Consumption and Production	Data analysis and probability techniques contribute to efficient resource allocation, evidence-based planning and sustainable managerial decision-making.

Value Added Course (VAC)

Course Code	Course Title	Total Credit	L-T-P
VA16201	Environment Education and Disaster Management	4	3-0-1

Course Objectives: The objective is to make students aware about the environmental functions and issues.

Course Learning Outcomes:

CO1: Students will develop a comprehensive understanding of the complex interactions between humans and the environment, tracing historical developments, analyzing contemporary challenges, and exploring sustainable solutions.

CO2: Students will be able to critically analyze the impact of human activities on natural resources, biodiversity, ecosystems, and the climate, evaluating the effectiveness of conservation efforts and mitigation strategies.

CO3: Students will gain an interdisciplinary perspective by integrating knowledge from fields such as ecology, geography, sociology, economics, and policy studies to address environmental issues holistically.

CO4: Students will cultivate problem-solving skills by applying scientific principles, analytical tools, and ethical considerations to devise innovative solutions for environmental challenges at local, regional, and global scales.

CO5: Students will develop the capacity for active engagement and advocacy in environmental stewardship, recognizing their role as responsible global citizens and agents of positive change in promoting sustainability and resilience.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	1	3	1	1	2	1	1	1	2	3	2	1	1

CO2	3	3	3	2	3	1	1	2	2	1	2	2	3	3	2	2
CO3	3	2	2	2	2	2	1	2	2	1	1	2	3	2	2	2
CO4	3	3	3	3	2	1	1	2	2	2	3	2	3	3	3	2
CO5	3	2	2	1	2	2	3	3	2	3	1	3	2	2	1	

Course Inputs:

Unit I: Humans and the Environment

The man-environment interactions: Human as hunger-gatherers; Origin of agriculture; Great ancient civilizations and the environment; Industrial revolution and its impact on the environment; Population growth and natural resource exploitation; Concept of sustainable development, Sustainable Development Goals (SDGs).

Unit II: Natural Resources and Sustainable Development

Overview of natural resources, renewable and non-renewable resources. Biotic resources: Major type of biotic resources-forests, grassland, wetlands, wildlife. Water resources: Types of water resources-fresh water and marine; Availability and use of water resources; Environmental impact of over-exploitation, issues and challenges; Conflicts over water. Soil and mineral resources: Energy resources: Renewable and non-renewable sources of energy; non-conventional energy sources-solar, wind, tidal, hydro, geothermal, biomass, hydrogen and fuel cells; Implications of energy use on the environment.

Unit III: Conservation of Biodiversity and Ecosystems

Biodiversity as a natural resource; Biodiversity in India and the world; Biodiversity hotspots; Endangered species, Red data book. Threats to biodiversity and ecosystems: Commercial exploitation of species; Invasive species. Major conservation policies: in-situ conservation approaches; Major protected areas; National and International initiatives for biodiversity conservation; the role of traditional knowledge, community-based conservation. Land use and Land cover change: deforestation, desertification, urbanization, Loss of Biodiversity and it's impact.

Unit IV: Environmental Pollution

Environmental issues at local, regional, and global levels. Air, noise, water, soil, thermal and radioactive pollution. Point sources and non-point sources of pollution.

Air pollution: Sources of air pollution; Primary and secondary pollutants; particulate matter and sulphur dioxide; Volatile Organic compounds (VOCs), Polycyclic aromatic hydrocarbons (PAHs) and Persistent organic pollutants (POPs); acid rain; smog, Ozone hole. National Ambient Air Quality Standards.

Water pollution: Sources of water pollution; River, lake and marine pollution, groundwater pollution; water quality, Water quality parameters and standards; adverse health impacts of water pollution on human and aquatic life.

Soil pollution: Soil pollutants and their sources; Solid waste and their recycling. Noise pollution: Definition of noise; Unit of measurement of noise pollution; Mineral exploitation; Environmental problems due to extraction of minerals and use; Degradation of soil quality and impact on agriculture productivity.

Noise pollution; Noise standards; adverse impact of noise on human health.

Thermal and Radioactive pollution: Sources and impact on human health and ecosystems.

Unit V : Climate Change: Impacts, Adaptation and Mitigation

Understanding climate change, Projections of global climate change with reference to temperature, rainfall, climate variability and extreme events; Climate change projections for the Indian sub-continent.

Impacts of climate change on ocean and land systems; Sea level rise, changes in marine and costal ecosystems; Impacts on forests and natural ecosystem; Impacts on animal species, agriculture, health, urban infrastructure; Climate-resilient development; Indigenous knowledge for adaption to climate change.

Mitigation of climate change: Green House Gas (GHG) Reduction vs. sink enhancement; Concept of carbon intensity, energy intensity and carbon neutrality; Energy efficiency measures; Renewable energy sources; Carbon capture and storage.

Unit VI: Environmental Management

Introduction to environmental laws and regulations: Constitutional provisions- Article 48A, Article 51A (g) and other environmental rights, Environmental legislations on the forest, wildlife and pollution control. Environmental audit and impact assessment; Waste Management- Concept of 3R (Reduce, Recycle and Recycle) and sustainability.

Unit VII: Environmental Treaties and Legislation

Major International Environmental Agreements: UN Conference on Human Environment 1972, Convention on Biological Diversity (CBD); Cartagena Protocol on Biosafety; Nagoya Protocol on Access and Benefit-sharing ; Convention on International Trade in Endangered Species of Wild Flora and Fauna(CITES); Ramsar Convention on Wetlands of International Importance; United Nations Convention to Combat Desertification (UNCCD); Vienna Convention for the Protection of the Ozone Layer; Montreal Protocol on Substances that Deplete the Ozone Layer and the Kigali Amendment; Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and their Disposal; Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; Stockholm Convention on Persistent Organic Pollutants; Minamata Convention on Mercury; United Nations Framework Convention on Climate Change (UNFCCC); Kyoto Protocol; Paris Agreement; India's status as a party to major conventions

Major Indian Environmental Legislations: The Wild Life (Protection) Act, 1972; The Water (Prevention and Control of Pollution) Act, 1974; The Forest (Conservation) Act, 1980; The Air(Prevention and Control of Pollution) Act, 1981 The Environment (Protection) Act, 1986; The Biological Diversity Act, 2002; The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006; Noise Pollution (Regulation and Control) Rules, 2000; Industry-specific environmental standards; Waste management rules, National Green Tribunal.

Major International organizations and initiatives: United Nations Environment Programme (UNEP), International Union for Conservation of Nature (IUCN), World Commission on Environment and Development (WCED), United Nations Educational, Scientific and Cultural Organization (UNESCO), Intergovernmental Panel on Climate Change (IPCC), and Man and the Biosphere (MAB) programme.

Unit VIII: Disaster Management

Concept of Hazards, Disasters, Natural and manmade hazards, Types of hazards, Concept of disaster management, Vulnerability and risk. Nature and characteristics of hazards: Flood, Cyclone, Drought, and Earthquake. Man made hazards – Industrial and Fire.

Disaster management cycle, Pre disaster management, during disaster management, Post Disaster review and management, Preventing, mitigation, preparedness, Adaptation. Disaster Management Plan at National Level, State Level, District Level and Community Level.

Practical:

1. Environment and its analysis

2 Water quality parameters

3 Determination of pH of water samples

4 Determination of acidity of water

5 Determination of Alkalinity of water sample

6 Measurement of turbidity of water samples

7 Determination of conductivity of water sample

8 Estimation of dissolved Oxygen (DO) in water sample

9 Estimation of Biological Oxygen Demand (BOD) of water

10 Estimation of Chemical Oxygen Demand (COD) of water

11 Determination of chloride in water

12 Determination of calcium hardness of water

13 Determination of total hardness of water

14 Determination of minerals in water

15 Visit to Industrial Sewage Disposal Unit

Recommended Learning Resources:

Textbooks

1. Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. *Ecology, Environmental Science and Conservation*. S. Chand Publishing, New Delhi.
2. Das, M.C. Text Book of Ecology, Tata Mc Graw Hills, New Delhi
3. Central Pollution Control Board Web page for various pollution standards. https://cpcb.nic.in/standards/
4. Chiras, D. D and Reganolds, J.P. (2010) . Natural Resource Conservation : Management for a Sustainable Future. 10th edition, Upper Saddle River, N.J. Benjamin/Cummins/Person.
5. Fisher, Michael H. (2018) An Environmental History of India-Form Earliest Times to the Twenty-First Century, Cambridge University Press.
6. Harris, France (2012) Global Environmental Issues, 2nd Edition. Wiley-Blackwell.
7. John W. Twidell and Anthony D. (2015). Renewable Energy Sources, 3rd Edition, Weir Publisher (ELBS)
8. Kanchi Kohli and Manju Menon (2021) Development of Environment Laws in India, Cambridge University Press.

Reference Material & Digital Resources

1. Krishnamurthy, K.V.(2003) Textbook of Biodiversity, Science Publishers, Plymouth, UK
2. Ministry of Environment, Forest and Climate Change (2019) A Handbook on International Environment Conventions & Programmes.
3. https://moef.govt.in/wp-content/uploads/2020/02/convention-V-16-CURVE-web.pdf
4. Rajagopalan, R. (2011). Environmental Studies: From Crisis to Cure. India: Oxford University Press.
5. Annual Reports of Ministry of Env., Forests and Climate Change, Govt of India, New Delhi

Note: Latest edition of the text books should be used.

SDG Mapping

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Builds environmental awareness, interdisciplinary knowledge, and sustainability skills
SDG 6	Clean Water and Sanitation	Addresses water resources, pollution, and conservation
SDG 7	Affordable and Clean Energy	Promotes renewable energy and energy efficiency
SDG 11	Sustainable Cities and Communities	Focus on urbanization, disaster management, and environmental planning
SDG 12	Responsible Consumption and Production	Encourages sustainable resource use and waste management (3R principles)
SDG 13	Climate Action	Covers climate change impacts, mitigation, and adaptation strategies
SDG 14	Life Below Water	Addresses marine ecosystems and water pollution
SDG 15	Life on Land	Focus on biodiversity conservation, forests, and land degradation
SDG 16	Peace, Justice and Strong Institutions	Covers environmental laws, policies, and governance frameworks

Semester II

Code	Course Title	Credit	L-T-P
EC-10002	Introductory Macroeconomics	4	3-1-0

Course Learning Objectives:

This course is designed to provide students with an understanding of the introductory topic of macroeconomics in the field of national income concept, circular flows of income in 2-3-4 sector economies, national income and economic welfare, concept of money, and inflation and deflation.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic concepts of national income.

CO2: Evaluate the income, expenditure and value-added methods of national income.

CO3: Understand the concept of economic welfare and national income.

CO4: Identify the evolution, functions and different approaches to money.

CO5: Analyze the concept of Inflation and Deflation.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs \POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1		3	1	2	2				1				3	1	1	
CO2		3	2	3	3	2		1	1		1		3	3	2	1
CO3	2	3	2	2	2	1			1		1	3	3	2	3	1
CO4		3	2	2	2			1	1		1		3	2	1	
CO5	2	3	2	3	3	2		1	1	1	2	3	3	3	3	2
Avg.	0.8	3	1.8	2.4	2.4	1	-	0.6	1	0.2	1	1.2	3	2.2	2	0.8

Course Inputs:

UNIT-I (12 Lectures): Introduction to Macroeconomics and Basic Concepts of National Income

Macro vs. Micro Economics; Why study Macroeconomics? Basic issues studied in macroeconomics; National Income Concepts-GDP, GNP, NDP and NNP at market price and factor cost. Personal income and disposable income.

UNIT-II (12 Lectures): Measurement of Macroeconomic Variables

Methods of measurement of National Income- income, expenditure and value added method. National Income Identities and Circular Flows of Income in 2, 3, and 4-sector economies.

UNIT-III (10 Lectures): Economic welfare and National income (12 Lectures)

Economic welfare, relation between economic welfare and national income, change in size of national income. National income as a nature of economic welfare.

UNIT-IV (12 Lectures):Money: Evolution and Functions of money; quantity theory of money- Cash Transaction, Cash Balances and Keynesian Approaches, Value of money and Index number of prices, Monetary tools.

UNIT-V (12 Lectures): Inflation and Deflation: Meaning, causes, effects and control of Inflation; hyperinflation, demand pull and cost push inflation, Deflation-meaning and causes, Inflation vs. Deflation, Stagflation

Textbooks:

1.Dornbusch, Fischer and Startz, (2010), Macroeconomics, McGraw Hill, 11th edition.

2.N. Gregory Mankiw. (2010), Macroeconomics, Worth Publishers, 7th edition.

3.Olivier Blanchard, (2009), Macroeconomics, Pearson Education, Inc., 5th edition.

4.Richard T. Froyen, (2005), Macroeconomics, Pearson Education Asia, 2nd edition.

Suggested Readings:

1.M.L. Jhingan, Macro Economists. Chand Publication

2.https://youtu.be/RO5HZkMyCxk

SDG Mapping for this Course

SDG No	SDG Title	Nature of Contribution
SDG 4	Quality Education	Develops economic literacy, analytical thinking, and conceptual understanding of macroeconomic indicators and monetary systems.
SDG 8	Decent Work and Economic Growth	Provides knowledge about national income accounting, money supply, inflation, and economic growth for sustainable economic development.
SDG 10	Reduced Inequalities	Examines welfare economics and the impact of inflation and income distribution on reducing economic disparities.
SDG 12	Responsible Consumption and Production	Helps understand inflation, purchasing power, and efficient utilization of economic resources for sustainable consumption patterns.

Minor Course:

Code	Course Title	Credit	L-T-P
EC12002	Principles of Macroeconomics	4	3-1-0

Course Learning Objectives:

This course is designed to provide students with an understanding of the introductory topic of macroeconomics in the field of national income concept, circular flows of income in 2-3-4 sector economies, national income and economic welfare, concept of money, and inflation and deflation.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic concepts of national income.

CO2: Evaluate the income, expenditure and value-added methods of national income.

CO3: Understand the concept of economic welfare and national income.

CO4: Identify the evolution, functions and different approaches to money.

CO5: Analyze the concept of Inflation and Deflation.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs \POs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4
CO 1		3	1	2	2				1				3	1	1	
CO 2		3	2	3	3	2		1	1		1		3	3	2	1
CO 3	2	3	2	2	2	1			1		1	3	3	2	3	1
CO 4		3	2	2	2			1	1		1		3	2	1	
CO 5	2	3	2	3	3	2		1	1	1	2	3	3	3	3	2
Avg.	0.8	3	1.8	2.4	2.4	1	-	0.6	1	0.2	1	1.2	3	2.2	2	0.8

Course Inputs unit wise

UNIT-I Introduction to Macroeconomics and Basic Concepts of National Income (12 hours)

Macro vs. Micro Economics; Why study Macroeconomics? Basic issues studied in macroeconomics; National Income Concepts-GDP, GNP, NDP and NNP at market price and factor cost. Personal income and disposable income.

UNIT-II Measurement of Macroeconomic Variables (12 hours)

Methods of measurement of National Income- income, expenditure and value-added method. National Income Identities and Circular Flows of Income in 2, 3, and 4-sector economies;

UNIT-III Economic welfare and National income (12 hours)

Economic welfare, relation between economic welfare and national income, change in size of national income. National income as a nature of economic welfare.

UNIT-IV Money (12 hours)

Evolution and Functions of money; quantity theory of money- Cash Transaction, Cash Balances and Keynesian Approaches, Value of money and Index number of prices, Monetary tools.

UNIT-V Inflation and Deflation (12 hours)

Meaning, causes, effects and control of Inflation; hyperinflation, demand pull and cost push inflation, Deflation-meaning and causes, Inflation vs. Deflation, Stagflation

Textbook:

Borjas, G. J. (2015). Labor Economics. McGraw-Hill Education.

Suggested reading

Ehrenberg, R. G., & Smith, R. S. (2016). Modern Labor Economics: Theory and Public Policy. Routledge.

Budd, J. W. (2013). Labor Relations: Striking a Balance. McGraw-Hill Education.

SDG Mapping for this Course

SDG No	SDG Title	Nature of Contribution
SDG 4	Quality Education	Develops economic literacy, analytical thinking, and conceptual understanding of macroeconomic indicators and monetary systems.
SDG 8	Decent Work and Economic Growth	Provides knowledge about national income accounting, money supply, inflation, and economic growth for sustainable economic development.
SDG 10	Reduced Inequalities	Examines welfare economics and the impact of inflation and income distribution on reducing economic disparities.
SDG 12	Responsible Consumption and Production	Helps understand inflation, purchasing power, and efficient utilization of economic resources for sustainable consumption patterns.

Multidisciplinary Course (MDC)

Course Code	Course Title	Total Credit	L-T-P
CS13002	DATA ANALYTICS	3	2-0-2

Course Objectives: The objective of this course is to provide an understanding of computers, computer operating system, and application of relevant software in managerial decision making.

Course Learning Outcomes

CO1 Complex Problem-Solving: Students will be able to analyze complex data sets, identify patterns, and propose data-driven solutions.

CO2 Critical Thinking: Students will critically evaluate data analysis methods, considering their limitations and applicability.

CO3 Analytical Reasoning: Students will demonstrate proficiency in using statistical and computational tools for data analysis.

CO4 Research-Related Skills: Students will be able to collect, preprocess, and validate data from various sources.

CO5 Communication Skills: Students will effectively communicate data analysis results through visualizations, reports, and presentations.

Course Input:

Unit I: Introduction to Entrepreneurship

Meaning, concept and evolution of entrepreneurship; characteristics, functions and types of entrepreneurs; entrepreneurial decision-making process; theories of entrepreneurship; distinction between an entrepreneur and a manager; intrapreneurship; growth of entrepreneurship in India; role of entrepreneurship in economic development; Five Ts of successful entrepreneurship: Transparency, Technology, Teamwork, Transformation and Time. Women entrepreneurship: concept, functions, growth and challenges of women entrepreneurs in India; development of women entrepreneurship; and institutional support and assistance to women entrepreneurs**.**

Unit II: Entrepreneurial Development and Startup Ecosystem

Meaning and major entrepreneurial competencies; Entrepreneurial Development Programme (EDP): meaning, need, objectives and phases; growth and challenges of EDPs in India; startup culture, growth and development with special reference to India; environmental analysis and entrepreneurial opportunity assessment; success stories of Indian and international entrepreneurs; family business culture in India; succession planning; and relevant case studies on startups and successful entrepreneurs.

Unit III: Institutional Finance and Entrepreneurial Support

Need and importance of institutional finance; role of commercial banks and major financial institutions including IDBI, IFCI, SIDBI, EXIM Bank and State Financial Corporations; institutional support agencies including NSIC, SIDO, SSIB, SISI, DIC and Entrepreneurship Development Institutions; SME support institutions and chambers; private entrepreneurial support systems including angel investment, venture capital, private equity, crowdfunding and bootstrapping; business incubators and startup accelerators; and government initiatives including Make in India, Startup India and Stand-Up India.

Unit IV: Micro and Small Enterprises and Emerging Business Environment

Meaning, definition and characteristics of micro and small enterprises; objectives and essentials of small-scale enterprises; steps in establishing micro and small enterprises; role of micro enterprises in economic development; problems and challenges of micro and small enterprises; digital disruptions and emerging business models; threats of mega alliances; strategies for sustaining new businesses; challenges of takeovers and acquisitions; emerging business opportunities, dimensions and challenges; and the regulatory environment for new and small businesses.

Unit V: Business Ideas, Feasibility and Business Plan Development

Sources and identification of business ideas; opportunity recognition and feasibility analysis; significance and preparation of business plans and project proposals; contents and components of a business plan; designing business processes, location and layout; operations planning and control; preparation, submission and presentation of project reports; project appraisal by financial and non-financial institutions; mobilization of resources for startups; accommodation and utilities; preliminary contracts with vendors, suppliers, bankers and principal customers; contract management; and basic startup problems and entrepreneurial challenges.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	2	3	1	1	1	2	3	2	2	3	2	1	1
CO2	2	2	3	2	2	1	1	1	2	1	1	2	2	2	1	1
CO3	3	3	3	3	2	1	1	1	2	2	3	2	3	3	2	2
CO4	3	3	2	3	2	1	1	1	2	1	2	2	2	2	3	1
CO5	2	2	2	2	3	3	1	2	2	1	2	2	2	2	1	1

Recommended Learning Resources:

Textbooks

1. "Data Science for Business" by Foster Provost and Tom Fawcett

Reference Material & Digital Resources

1. "Python for Data Analysis" by Wes McKinney
2. **"**Introduction to Statistical Learning" by Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani

Note: Latest edition of the text books should be used.

SDG Mapping

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Development of analytical, computational, and problem-solving skills
SDG 8	Decent Work and Economic Growth	Enhances employability through data analytics and digital skills
SDG 9	Industry, Innovation and Infrastructure	Supports innovation through data-driven solutions and technologies
SDG 12	Responsible Consumption and Production	Data-driven optimization of resources and efficient decision-making
SDG 16	Peace, Justice and Strong Institutions	Ethical use of data, transparency, and accountability in decision-making

Ability Enhancement course (AEC)

Code	Course Title	Credit	L-T-P
AE14002	Translation Studies (Odia)	2	2-0-0

Refer to Department of Odia, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14004	Translation Studies (Hindi)	2	2-0-0

Refer to Department of Hindi, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14006	Translation Studies(Sanskrit)	2	2-0-0

Refer to Department of Sanskrit, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14008	Translation Studies (Santhali)	2	2-0-0

Refer to Department of Santali, School of Comparative Tribal Languages and Literatures, KISS-DU

Code	Course Title	Credit	L-T-P
AE14010	Translation Studies (English)	2	2-0-0

Refer to Department of English, School of Comparative Tribal Languages and Literatures, KISS-DU

Skill Enhancement Course (SEC):

Course Code	Course Title	Total Credit	L-T-P
TR15002	Professional Readiness and Development	3	2-1-0

Course Objectives: To promote skills education in an integrated and holistic manner with general education so as to ensure pathways for progression and mobility across forms of education and skills

Course Learning Outcomes (COs)

After successful completion of the course, students will be able to:

CO1: Interpret contemporary business affairs, current economic trends, and recent corporate developments using real-time data and case studies.

CO2 :Examine sustainable business practices including green finance, ESG, circular economy, and SDGs, and assess their relevance in modern business.

CO3 :Demonstrate practical understanding of banking, digital payments, and financial services, and apply them in personal financial decision-making.

CO4 :Apply principles of commerce in real-life contexts such as budgeting, taxation, financial planning, and institutional frameworks.

CO5 :Develop employability skills including resume writing, professional communication, interview techniques, and workplace readiness.

CO–PO–PSO Mapping Table:

3 – High Correlation ,2 – ModerateCorrelation, 1 – Low Correlation, Blank – No Correlation

COs \	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	2	3	2	1	2	3	2	2	2	3	2	1	1
CO2	3	3	3	2	3	1	1	3	3	1	1	2	3	3	2	1
CO3	3	3	3	3	3	2	1	1	2	2	3	2	2	2	3	2
CO4	3	3	3	3	3	2	1	2	2	2	2	2	2	2	2	3
CO5	2	2	3	2	2	3	3	2	2	3	2	3	2	1	1	2

Course Inputs:

UNIT I: Contemporary Business Affairs and Current Business Landscape(9 Hours)

- Understanding contemporary business affairs through newspapers, digital media, and market reports
- Emerging business issues: inflation, sustainability, AI in business, and changing consumer trends
- Recent advances in science and technology (AI, space research by Indian Space Research Organisation)
- Environmental issues and climate change; global initiatives (e.g., United Nations Climate Change Conference)
- Social issues, international relations, and major global organizations like United Nations
- Case Study: Analysis of a recent corporate event / startup success / merger case
- Practical Exposure: Weekly business news analysis and student presentation

UNIT II: Sustainable Business and Responsible Market Practices(9 Hours)

- Introduction to sustainable business and its relevance in the modern economy
- Green finance, Blue Finance, Green Marketing, Orange Economy, GIG Economy. SDGs and business: role of business in achieving sustainable development goals
- Emerging trends: social entrepreneurship, circular economy, carbon market and sustainable supply chains

Case Study: Analysis of a sustainable business / green brand / social enterprise

Practical Exposure: Sustainable product audit and SDG mapping of a business enterprise

UNIT III: Practical Banking and Financial Services(9 Hours)

- Banking in daily life: accounts, deposits, loans, and essential banking services
- Digital banking in practice: UPI, mobile banking, online payments, and cyber safety
- Basics of mutual funds, SIP, savings, and investment decision-making
- Financial services in real life: insurance, NBFCs, EMI, loans, and credit score
- Case Study: Personal Financial Decision-Making (Savings vs Investment / Loan vs EMI)
- Practical Exposure: Banking form filling, digital payment demo, and financial product comparison

UNIT IV: Commerce in Practice and Financial Decision-Making(9 Hours)

- Commerce in everyday transactions: GST, invoices, e-commerce, and digital payments
- Personal financial planning, Financial products in daily life
- Role of institutions in commerce: SEBI, RBI, LIC, NABARD, SIDBI, and financial inclusion schemes
- Case Study: Personal Budgeting and Financial Planning Exercise
- Practical Exposure: Bill analysis, budgeting workshop, and financial decision simulation

UNIT V: Placement Readiness and Professional Skill Development(9 Hours)

- Career opportunities in commerce and management: banking, finance, HR, marketing, insurance, and analytics
- Resume building, email writing, LinkedIn basics, and professional communication
- Placement preparation: aptitude basics, group discussion, and interview techniques
- Workplace readiness: corporate etiquette, teamwork, time management, and professional behaviour
- Case Study: Workplace Situations and Professional Response Analysis

Practical Exposure: Resume workshop, mock interview, GD simulation, and role play

Recommended Learning Resources:

Textbooks

1. Sri Ram Srirangam, Indian Economy
2. Arihant experts, Know your State Odisha
3. R S Sharma, India's Ancient Past
4. Satish Chandra, History of Medieval India
5. Rajiv Ahir, A Brief History of Modern India
6. M Laxmikanth, Indian Polity
7. R S Aggarwal, Quantitative Aptitude for Competitive Exams
8. R S Aggarwal, An advanced approach to Data Interpretation
9. Nishit K Sinha, Logical Reasoning and Data Interpretation for CAT

Reference Material & Digital Resources

1. Arun, How to prepare for Quantitative Aptitude for CAT
2. Arun Sharma, How to prepare for Logical Reasoning for CAT
3. R S Aggarwal, A modern approach to Logical Reasoning by
4. R S Aggarwal, A modern approach to Verbal and Non-Verbal Reasoning by
5. B S Sijwali, A new approach to Reasoning (Verbal, Non-Verbal and Analytical)

Note: Latest edition of the text books should be used.

SDG Mapping:

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Course provides practical exposure (case studies, workshops, simulations) to enhance applied learning
SDG 5	Gender Equality	Integration of gender sensitivity in workplace readiness and teamwork exercises.

SDG 8	Decent Work and Economic Growth	Placement readiness, professional skill development, and career opportunities in commerce and management.
SDG 9	Industry, Innovation, and Infrastructure	Exposure to advances in science and technology (AI, space research).
SDG 12	Responsible Consumption and Production	Sustainable product audits, circular economy, and green marketing practices.
SDG 13	Climate Action	Coverage of environmental issues, climate change, and global initiatives (UN Climate Change Conference.

Value Added Course (VAC):

Value Added Course (VAC) (Choose any one)	VA16124	Enhancement of Active Citizenship and Democratic Values	2	0	0	2
	VA16134	Inclusive Education and Gender Equality	2	0	0	2
	VA16142	Combating Radicalism through Education	2	0	0	2
	VA16146	**Indian Knowledge System**	**2**	**0**	**0**	**2**
	VA16394	Flutter Application Development	1	0	1	2

Code	**Course Title**	**Credit**	**L-T-P**
VA16146	Indian Knowledge System	2	2-0-0

Course Objectives: The course on Indian Knowledge System for Commerce Students aims to introduce students to the profound and diverse intellectual traditions of India, with a focus on how these ancient knowledge systems can be integrated into modern commerce, business, and economics. This course will explore Indian philosophical, ethical, and scientific contributions, emphasizing the holistic approach to business practices, sustainability, and corporate social responsibility. Students will learn about the historical, cultural, and intellectual foundations that shaped Indian commerce and business models, and how principles like Dharma (ethics), Karma (action), and the interconnectedness of society can influence modern-day business strategies.

Course Learning Outcomes:

CO1- Define and explain key concepts such as Dharma, Karma, Ahimsa, and sustainability, and understand their relevance to modern commerce and business practices.

CO2- Apply the principles of Indian Knowledge to case studies of contemporary businesses and corporate governance practices, identifying ethical issues and proposing solutions based on Indian ethical traditions.

CO3- Analyse the role of Indian economic and philosophical traditions in shaping business practices in ancient and modern India, identifying key differences and continuities.

CO4- design business models or strategies that integrate Indian ethical principles (such as Dharma and Karma) into the operations of a modern corporation, promoting ethical conduct and sustainability.

CO5- Critically evaluate the effectiveness of integrating Indian Knowledge Systems into contemporary business practices, discussing potential challenges and benefits, and proposing recommendations for improvement.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	2	3	2	1	3	2	1	1	2	3	2	1	1
CO2	3	3	3	3	3	2	2	3	2	2	2	2	3	3	3	3
CO3	3	3	3	3	3	2	1	3	3	2	1	2	2	3	3	2
CO4	3	3	3	3	3	3	2	3	2	3	2	3	3	2	2	3
CO5	3	3	3	3	3	3	2	3	2	3	2	3	2	3	3	3

Course Input:

Unit I: Indian Ethical Foundations for Business (14 lectures)

Introduction to Indian Philosophy and Commerce: Understanding the ancient Indian views on ethics, business, and society as framed by the Vedas, Upanishads, and other classical texts. Dharma and Commerce: Exploring the concept of Dharma (moral and ethical duties) and its application in business ethics, corporate governance, and leadership. Karma and Responsibility in Business: Examining the role of individual actions (Karma) and how it aligns with corporate social responsibility (CSR), sustainable business practices, and social justice. The Role of Trust and Relationships: Discussing the significance of interpersonal relationships in Indian business practices, such as the importance of trust, reputation, and long-term business partnerships.

Unit II: Indian Economic Thought and Sustainable Business Practices (16 lectures)

Ancient Indian Contributions to Commerce: Insights into ancient Indian trade, banking, and economic systems, including the role of guilds, barter systems, and the evolution of economic transactions. The Role of Sustainability in Indian Knowledge: Exploring the principles of ecological sustainability and how ancient Indian practices like Ahimsa (non-violence) and Vastu Shastra (architecture for harmony) relate to modern-day environmental sustainability and green business. Indian Concepts of Wealth and Prosperity: Examining the holistic view of wealth in Indian thought, as discussed in texts such as the Arthashastra and Manusmriti, and its relevance to contemporary wealth creation, resource management, and economic development. Modern Integration of Indian Knowledge in Commerce: Case

studies on how contemporary businesses incorporate Indian ethical values, sustainability, and responsibility in their operations, particularly in the context of India's growing economy and globalization.

Recommended Learning Resources:

Textbooks

1. "Indian Business Ethics" by Pradip N. Khandwalla

2. "The Arthashastra" by Kautilya (Chanakya)

3. "The Bhagavad Gita: A Guide to Managing the Business of Life" by R. C. Sharma

4. "Corporate Governance in India: A Historical Perspective" by A. C. Fernando

5. "Vedic Economics: The Art of Sustainable Living" by H. R. Khanna

Reference Material & Digital Resources

1. "Karma and Business: Insights from Indian Philosophy" by S. R. Sharma

2. "The Vedas and the Upanishads: Wisdom for Modern Business" by S. S. Sivananda

3. "Dharma and the Indian Economy" by T. K. S. Pillai

4. "Sustainable Development: Perspectives from Indian Philosophy" by Nandini Mehta

5. "The Wisdom of Indian Management" by Rajiv Misra

SDG Mapping

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Promotes value-based and holistic education
SDG 8	Decent Work and Economic Growth	Encourages ethical and sustainable business practices
SDG 10	Reduced Inequalities	Promotes fairness and inclusive growth
SDG 12	Responsible Consumption and Production	Supports sustainable business and resource use
SDG 16	Peace, Justice and Strong Institutions	Encourages ethical governance and justice in business

Value Added Course (VAC) **(Choose any one)**	VA16422	Human Values and Professional Ethics	2	0	0	2
	VA16430	Life Skills Education	2	0	0	2
	VA16482	Self -help and Happiness	2	0	0	2
	VA16484	Community Engagement and Social Responsibility	2	0	0	2
	VA16486	Pioneering Service Learning and Community	2	0	0	2
	VA16488	Sports and Yoga	2	0	0	2

Code	**Course Title**	**Credit**	**L-T-P**
VA16422	Human Values and Professional Ethics	2	2-0-0

Course Objectives:

To assist students in understanding the role of values and ethics in establishing a fair and equitable social order. To encourage students to inculcate human values and morals in their professional lives.

Course Learning Outcomes

CO1- Comprehend the implications of Human Values in one's life.

CO2- Understand the ideas of human values by discussion and explanation.

CO3- Apply the concepts and practices in their daily life.

CO4- Analyse the links between human values and professional ethics.

CO5- Evaluate and judge what to do and what not to do.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	2	3	2	1	3	2	1	2	2	3	2	2	3
CO2	3	3	2	3	3	2	1	3	2	2	2	2	3	2	2	3
CO3	3	3	3	2	3	2	2	3	2	3	2	3	3	2	3	3
CO4	3	3	3	3	3	3	2	3	3	3	2	3	2	2	3	3
CO5	3	3	3	3	3	3	2	3	3	3	2	3	2	2	3	3

Course Inputs:

UNIT I: Introduction of Human Values-

Need, fundamental guidance, content material and method for cost education: need of self-introspection, understand happiness and prosperity, approach to meet the human aspirations, information and dwelling in concord at numerous levels.

UNIT II: Introduction of Professional Ethics-

Basic concepts, personal and professional ethics, lifestyles skills, emotional intelligence, thought of ethics, value education, ethical development,work place- right and responsibilities.

Recommended Learning Resources:

Textbooks

1. Professional Ethics: R. Subramanian, Oxford University Press, 2015.

2. The Human Values: Dewan, M.L., Hosdurg, A. K., Nayak, P., Concept publishing company, New Delhi, 2009.

Reference Material & Digital Resources

e-PG-Pathshala

NMEICT/any other Government Initiatives

NPTEL Online Courses URL: https://nptel.ac.in/course.html

SWAYAM courses URL: https://swayam.gov.in/explorer

MOOC Courses URL: https://www.mooc.org/#course-categories

KISS LMS: :https://learn.kiss.ac.in

Note: Latest edition of the text books should be used.

SDG Mapping

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Promotes value-based education and ethical awareness
SDG 5	Gender Equality	Encourages equality and respect
SDG 8	Decent Work and Economic Growth	Promotes ethical workplace practices
SDG 10	Reduced Inequalities	Encourages fairness and inclusiveness

SDG 16	Peace, Justice and Strong Institutions	Promotes justice, ethics, and responsible citizenship

Course Code	Course Title	Total Credit	Credit
VA16430	Life Skills Education	2	2-0-0

Course Objectives: • Enable students to understand core life skills , its concept, process and practice • Apply life skills to cope with the demands and challenges in day to day life • Explore alternatives and make rational decisions in solving each problem or issue • Enable students to manage Sexual and Reproductive Health (SRH) concerns • Develop understanding on the life cycle of girl child

Course Learning Outcomes:

CO1: Understand concepts and importance of life skills.

CO2: Apply life skills to cope with daily challenges.

CO3: Analyze social norms, gender issues, and health concerns.

CO4: Develop decision-making and problem-solving abilities.

CO5: Evaluate personal behavior and adopt responsible practices.

CO–PO-PSO Mapping Table

- **1 =** Weakly Mapped (Low) 2 = Moderately Mapped (Medium)
- 3 = Strongly Mapped (High) "–" = No correlation

COs ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	2	2	1	2	2	1	2	2	2	1	1	2
CO2	2	2	3	2	3	3	2	3	2	2	2	3	3	2	2	3
CO3	2	3	2	2	3	2	2	3	2	2	2	2	3	2	1	3
CO4	2	2	3	2	3	3	2	3	2	3	2	3	3	3	2	3
CO5	2	3	2	3	3	2	2	3	2	3	2	3	3	2	2	3

Course Input:

Unit- I Introduction to Life Skills (17 lectures)

Concept of Skills and Life Skills • Definition and importance of life skills • Ten core Life skills (WHO model) • Life Skills Education, Life Skills Approach, Life Skills Based Education, Social Skills, Self Awareness(Self concept, Self Confidence, Techniques used for knowing self : Open your heart, SWOT analysis, Johari window) • Empathy (Meaning of empathy, differences between sympathy and empathy) • Effective Communication(components of

effective communication, Styles of communication, Barriers in communication, How to say NO) • Interpersonal Relationship(Meaning, types ,qualities for effective interpersonal relationship, end the relationship constructively), Thinking Skills and Coping Skills , Critical thinking and Creative thinking (Definition and Stages) • Problem solving and Decision making (Definition, Steps in problem solving and decision making, Models of decision making) • Meaning and types of emotions, coping strategies • Meaning and sources of stress, coping strategies, Life Skills Education for enhancing value of the girl child, Survival of girl child,

Unit II: Social norms (13 lectures)

Barrier to survival Lack of access and control over resources Policies, schemes, programs related to foeticide, Puberty and Marriage, Health and Reproductive health (Definition, Communicable diseases, Reproductive health issues) Life Skills for responsible sexual behavior Menstrual hygiene and care Institutional barriers for awareness, myth busting around menstruation and sanitation Schemes and programs related to menstruation Marriage and evolving gender roles Acts and Laws related to marriage includes laws on PMCA and POCSO as well as Sexual Harassments at workplace • Negligence of girl child and Violence Gender inequalities in curative and preventive health care (Anaemia, Malnutrition and stunting) Gender norms affecting education Discriminatory gender biased norms & practices Acts and Laws related to: Gender Based Violence, domestic violence, Dowry & dowry death Early Pregnancy and its prevention Motherhood Penalty & Concretization of Patriarchal Norms Course Outcomes (COs)

Recommended Learning Resources:

Textbooks

1. Dahama O.P., Bhatnagar O.P, (2005), Education and Communication for Development, (2nd Edn.), Oxford& IBH Publishing Co. Pvt. Ltd. New Delhi.

2. Duffy Grover Karen, Atwater Eastwood, (2008), (8th Edn.), Psychology for Living- Adjustment, Growth and Behaviour Today, Pearson Education Inc, New Delhi.

3. Jane S Halonen, John W. Santrock, (2009), Psychology: Context & Application, McGraw-Hill Companies Inc., Third Edition, USA

4. Mangal S.K., (2008), An Introduction to Psychology, Sterling Publishers Pvt. Ltd., New Delhi.

5. Nair .V. Rajasenan, (2010), Life Skills, Personality and Leadership, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu.

6. Nair. A. Radhakrishnan, (2010), Life Skills Training for Positive Behaviour, Rajiv Gandhi National Institute of Youth Development, Tamil Nadu.

Reference Material & Digital Resources

1) Nair. V.Rajasenan,(2010),Life Skills, Personality and Leadership,Rajiv Gandhi National Institute of Youth Development,Tamilnadu

2) RGNIYD (2008) Facilitators Manual on Enhancing Life Skills,Tamilnadu

3) Family Health International, NACO,USAID(2007),LifeSkills Education tool kit for Orphans and vulnerable children in India

4) Morgan and King,(1993) Introduction to Psychology, Tata McGraw-Hill Publishing Company Ltd,New Delhi.

5) Wallace R. M.asters,(2001) Personal Development for Life and Work: UK,South Western

6) Adolescence and Life Skills (2003) Commonwealth Youth Programme Asia Centre,Tata Mc Graw. Hill Websites:

UNFPA-http://www.unfpa.org/ UNICEF-http://www.unicef.org/ WHO –http://www.who.int./en/ Jhpiego - https://www.jhpiego.org/countries-we-support/india/

SDG Mapping

SDG No.	SDG Title	Nature of Contribution
SDG 3	Good Health and Well-being	Promotes mental, emotional, and reproductive health awareness
SDG 4	Quality Education	Enhances life skills and holistic learning
SDG 5	Gender Equality	Focus on gender issues, girl child development, and equality
SDG 10	Reduced Inequalities	Addresses social and gender inequalities
SDG 16	Peace, Justice and Strong Institutions	Encourages responsible and ethical behavior

Course Code	Course Title	Total Credit	Credit Hours
VA16482	Self-help and Happiness	2	2-0-0

Course Objectives: This course aims to enable students to understand and address personal well-being by exploring topics like anxiety, stress, relationships, and happiness. The focus will be on practical strategies and interventions for improving mental health and fostering positive well-being. Students will also gain hands-on experience in measuring and managing stress, anxiety, and relationships through activity-based learning.

Course LearningOutcomes (COs)

CO1: Understand concepts of anxiety, stress, relationships, and happiness.

CO2: Apply strategies to manage anxiety and stress.

CO3: Analyze relationship dynamics and psychological well-being.

CO4: Develop techniques for improving happiness and emotional health.

CO5: Evaluate personal well-being and adopt self-improvement strategies.

CO–PO-PSO Mapping Table

- **1 = Weakly Mapped (Low) 2 = Moderately Mapped (Medium)**

- **3 = Strongly Mapped (High) "–" = No correlation**

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	2	2	3	2	1	3	3	2	1	2	3	2	2	2
CO2	3	3	3	3	3	2	2	3	2	3	2	3	3	3	2	3
CO3	3	3	3	3	3	2	2	3	2	3	2	2	2	3	3	2
CO4	3	2	3	3	3	3	1	3	2	3	2	3	2	2	2	3
CO5	3	3	3	3	3	3	2	3	2	3	2	3	2	3	2	3

Course Input:

Unit I: Understanding Mental Health and Well-Being (13 hours)

Anxiety, Nature, Types, Fear, Phobias (Generalized and Specific), Definition and nature of anxiety, Types of anxiety disorders, Overview of fear and phobias, Differences between generalized and specific phobias, Strategies for managing and reducing anxiety

Stress: Definition, Nature, Types, and Sources: Understanding stress and its nature, Types of stress (acute, chronic, etc.), Sources of stress (external and internal), Stress appraisal process, Effects of stress on psychological functioning and health, PTSD (Post-Traumatic Stress Disorder)

Relationships: Dynamics, Evolution, Transition, Integration, and Transformation: Understanding the nature of relationships, Dynamics in personal and professional relationships, The evolution of relationships over time, Key factors in relationship transitions and transformations

Happiness: Definition, Positive Well-being, and Dynamics: Defining happiness and well-being, An integrative look at happiness: psychological and physiological aspects, Understanding the dynamics of happiness in life, Positive psychology and strategies to increase happiness

Unit II: Activity-Based Practical Learning (17 hours)

Measurement of Anxiety and Strategies to Deal with Anxiety Attacks, Introduction to SCAT (Sinha's Comprehensive Anxiety Test), Administering and scoring SCAT, Activity: Catharsis (Emotional Unburdening), Practical strategies to cope with anxiety and fear

Overcoming Stress and Strategies to Handle Stress, Techniques for managing stress: relaxation exercises, time management, and mindfulness, Developing psychosocial support systems, Therapy methods: Art, music, and color therapy, Activity-Based Learning: Stress-reducing activities

Measurement of Relationships and Developing Healthy Relationships, Measuring relationship quality and communication, Role-playing for relationship-building: psychodrama and sociodrama, Activity: Practicing healthy communication and conflict resolution

Happiness: Body and Mind Coordination and Cognitive Behavioral Intervention, Cognitive-behavioral interventions to enhance happiness, Overcoming fear and anxiety through cognitive strategies, Activity: Increasing your own happiness through self-reflection

Recommended Learning Resources:

Textbooks

1. The Happiness Project, Gretchen Rubin, A comprehensive exploration of strategies for increasing happiness and well-being.
2. The Anxiety and Phobia Workbook, Edmund J. Bourne, A practical guide for understanding and managing anxiety disorders.
3. The Stress Management Handbook: Strategies for Health and Inner Peace , James W. Dazoul, Techniques and strategies to manage stress and improve psychological health.
4. The Art of Loving by Erich Fromm, A deep dive into the dynamics and psychology of relationships and love.

Reference Material & Digital Resources

1. The Power of Now, Eckhart Tolle, Understanding the importance of living in the present moment for well-being and happiness.
2. The Happiness Hypothesis by Jonathan Haidt, A psychological perspective on happiness, integrating science with personal experience.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 3	Good Health and Well-being	Promotes mental health, stress management, and emotional well-being
SDG 4	Quality Education	Encourages life skills and holistic learning
SDG 5	Gender Equality	Promotes equality in relationships and emotional awareness
SDG 10	Reduced Inequalities	Supports inclusive mental health awareness
SDG 16	Peace, Justice and Strong Institutions	Promotes harmony, emotional balance, and conflict resolution

Course Code	Course Title	Total Credit	Credit Hours
VA16486	Pioneering Service Learning and Community Development	2	2-0-0

Course Objectives:

Pioneering, Service Learning, and Community Development are interconnected concepts that involve proactive engagement with communities to address needs, foster positive change, and enhance the well-being of individuals and society. This course emphasizes the experiential learning, encouraging students to apply theoretical knowledge in real-world settings.

Course Learning outcomes:

CO1- Develop a strong sense of civic responsibility and an understanding of the global context of local community issues.

CO2- Exhibit a commitment to ethical behavior and social justice principles in all aspects of community work.

CO3- Apply knowledge, skills, and attitudes in an integrated manner to develop and implement a community project.

CO4-Foster reflective thinking on personal growth and community impact. Encourage critical analysis of the societal and systemic issues related to community development.

CO5- Critically analyzing personal and community development experiences. Develop the decision making skill.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs/PSOs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	2	1	2	3	2	2	3	2	2	1	2	3	2	2	1
CO2	3	3	2	2	3	2	1	3	2	2	1	2	2	2	2	1
CO3	3	3	3	3	3	3	3	3	2	3	2	3	3	3	3	3
CO4	3	3	3	3	3	2	2	3	2	2	2	3	2	2	2	2
CO5	3	3	3	3	3	3	2	3	2	3	2	3	2	2	2	3

Course Contents:

Unit-IPioneering and Service Learning (15 Lectures)

History of Rovers andRanger, Aims , Promise & Law, Principles, Motto, Sign of Rovers and Rangers, History of Rovering and Rangering (scout &guide), Principles of scout guide movement, Pioneering Skills: importance of pioneering and Types of pioneering**,** Basic Pioneering, Advanced Pioneering**,** Knot Tying.

Service learning and Activities: Scouting Principles and Service ,role and responsibilities of volunteers , Women Empowerment Programme, Blood Donation Camp, Legal Awareness Programme, health camp, attend Survive Camp, Swachha Bharat Programme, Environment Protection Programme, celebration of national and international days , BSG Foundation Day / BSG Flag Day, Independence Day, Republic Day, National Unity Day, Thinking Day (Girl Guides), St. George's Day (Scouts & Guides), World Scout Day: Environment Day (June 5th), International Day of Peace, International Day for Disaster Reduction , Youth Leadership and Empowerment:principles and practices of effective youth leadership. Participants will develop skills for self-leadership, team leadership, and community engagement

Unit- II CommunityDevelopment /Community Service Projects:

Community Health and Well-being, Community Development Strategies, Identifying and analyzing the needs of communities, Community Service Projects, Designing and implementing community service projects that address local needs. Leadership Training and Team Building Activities, Engaging in team-building exercises and activities to strengthen group cohesion. Emphasizing the importance of collaboration in community development.

Recommended Learning Resources:

Textbooks

1. The Scout Handbook by Boy Scouts of India
2. Scouting and Guiding Around the World by John Long
3. The History of Girl Guiding by Elizabeth Hammill
4. The History of Scouting by John Thurman
5. The Girl Scout Counselor's Guide by Girl Scouts of the India
6. Scout/Guide Proficiency Badges Book
7. Bharat Scouts and Guides Handbook

Reference Material & Digital Resources

1. Centers for Disease Control and Prevention (CDC): https://www.cdc.gov/
2. World Health Organization (WHO): https://www.who.int/
3. Public Health England (PHE): https://www.gov.uk/government/organisations/public-health-england
4. American Public Health Association (APHA): https://www.apha.org/
5. The National Institute of Mental Health (NIMH): https://www.nimh.nih.gov/
6. Healthy People 2030: https://healthypeople.gov/
7. Points of Light: https://www.pointsoflight.org/
8. VolunteerMatch: http://www.medicineandbeyond.org/boston%2C%2Bma%2C%2Busa.html
9. Idealist: https://www.idealist.org/en
10. Volunteer World: https://www.volnow.org/

SDG Mapping

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 3	Good Health and Well-being	Health camps, awareness programs
SDG 4	Quality Education	Experiential learning and skill development
SDG 5	Gender Equality	Women empowerment initiatives
SDG 11	Sustainable Cities and Communities	Community development and local engagement
SDG 13	Climate Action	Environmental awareness and protection programs

SDG 16	Peace, Justice and Strong Institutions	Civic responsibility and ethical citizenship

Course Code	**Course Title**	**Total Credit**	**Credit Hours**
VA16488	Sports and Yoga	2	1-0-1

Course Objectives

The course is designed to provide students with a fundamental understanding of Physical Education, Sports, and Yoga while promoting physical fitness, health, and overall well-being. It aims to develop basic knowledge and practical skills in physical activities, encourage discipline and teamwork, and inspire students to adopt a healthy lifestyle through regular participation in sports and yoga.

After successful completion of the course, students will be able to:

CO1: Explain the fundamental concepts and importance of Physical Education, Sports, and Yoga in promoting health and well-being.

CO2: Demonstrate basic physical fitness exercises, sports skills, and yoga practices for overall physical and mental development.

CO3: Apply the principles of health, fitness, nutrition, and wellness to maintain a healthy lifestyle.

CO4: Develop discipline, teamwork, leadership, sportsmanship, and ethical values through participation in physical activities and sports.

CO5: Adopt lifelong habits of regular physical activity and yoga to improve fitness, reduce stress, and enhance quality of life.

CO–PO–PSO Mapping Table

COs \ POs/PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	2	2	2	2	2	1	2	2	2	1	1	1
CO2	3	3	2	2	3	2	2	2	3	2	2	2	3	2	2	2
CO3	3	3	2	2	3	3	3	3	2	2	2	3	2	2	2	2
CO4	2	2	3	2	2	3	3	3	3	3	2	3	2	2	2	3
CO5	2	3	2	2	3	3	3	3	2	2	3	3	2	2	3	3

Mapping Scale:	
1 – Low (Weakly Mapped)	3 – High (Strongly Mapped)
2 – Medium (Moderately Mapped)	“–” No Correlation

Course Inputs:

Unit-I Introduction

1. Meaning and definition of Physical Education, Sports and Yoga.
2. Aims, Objectives and Importance of Physical Education, Sports and Yoga.
3. History of Physical Education, Sports and Yoga.
4. Modern trends of Physical Education, Sports and Yoga.
5. Brief concept of Education in relation to Physical Education, Sports and Yoga

Unit -II Yoga & Fitness Training

1. Importance of Yoga & Fitness

2. Fundamentals Principles of Yoga & Fitness Training

3. Components of Fitness and Fitness Equipments

4. Types of Yoga Practices - Asanas, Pranayama and Meditation

5. Introduction to Balanced Diet for Fitness

Reference Books

1. Bucher, C. A. (n.d.) Foundation of physical education. St. Louis: The C.V. Mosby Co. Deshpande, S. H. (2014). Physical Education in Ancient India. Amravati: Degree college of Physical education.

2. Mohan, V. M. (1969). Principles of physical education. Delhi: Metropolitan Book Dep. Nixon, E. E. & Cozen, F.W. (1969). An introduction to physical education. Philadelphia: W.B. Saunders Co.

3. William, J. F. (1964). The principles of physical education. Philadelphia: W.B. Saunders Co.

4. Coalter, F. (2013) Sport for Development: What game are we playing?.Routledge.

5. Singh Hardayal (1991), Science of Sports Training, DVS Publication, New Delhi 6. Muller, J. P.(2000). Health, Exercise and Fitness. Delhi : Sports.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 3	Good Health and Well-being	Promotes physical fitness and healthy lifestyle
SDG 4	Quality Education	Enhances experiential and skill-based learning
SDG 5	Gender Equality	Encourages inclusive sports participation
SDG 11	Sustainable Cities and Communities	Preserves traditional cultural practices

SDG 16	Peace, Justice and Strong Institutions	Promotes fairness, discipline, and teamwork

Semester III

(Include DSE Groups, MOOC/Open Elective options)

Code	Course Title	Credit	L-T-P
EC-20001	Mathematical Methods for Economics	4	3-1-0

Course Learning Objectives:

The course aims to equip students with the essential mathematical tools and techniques required for economic analysis. Through a comprehensive study of calculus, linear algebra, and optimization theory, students will develop proficiency in applying mathematical concepts to model and solve economic problems. By mastering these fundamental mathematical skills, students will enhance their ability to critically evaluate economic theories, interpret empirical findings, and communicate economic analysis effectively.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

CO1: Demonstrate proficiency in fundamental mathematical concepts such as calculus, linear algebra, and optimization theory.

CO2: Acquire a deeper understanding on mathematical techniques to analyze and solve economic problems, including consumer and producer behaviour, market equilibrium, and welfare analysis.

CO3: Utilize mathematical models to understand and evaluate economic theories and hypotheses, and to interpret empirical results.

CO4: Develop the ability to construct and manipulate mathematical models relevant to various economic contexts, such as microeconomics, macroeconomics, and econometrics.

CO5: Communicate mathematical reasoning and economic analysis effectively, both orally and in writing, using appropriate mathematical notation and terminology.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO1 1	PO 12	PSO1	PSO2	PSO3	PSO4
CO1	–	3	1	2	3	1	–	2	1	–	1	–	3	2	2	1
CO2	–	3	1	3	3	2	–	2	1	–	2	1	3	3	2	1
CO3	–	3	2	3	3	3	1	2	2	1	2	1	2	3	3	2
CO4	–	3	2	3	3	3	1	3	2	1	2	1	2	3	3	2
CO5	1	2	3	2	2	2	2	2	2	1	2	–	1	2	2	3
Average	0.2	2.8	1.8	2.6	2.8	2.2	0.8	2.2	1.6	0.6	1.8	0.6	2.2	2.6	2.4	1.8

Course Inputs:

UNIT-I: Linear algebra (12 Lectures)

Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations: properties of their solution sets; determinants: characterization, properties and applications.

UNIT-II: Functions of several real variables (12 Lectures)

Geometric representations: graphs and level curves; differentiable functions: characterizations, properties with respect to various operations and applications; second order derivatives: properties and applications; the implicit function theorem, and application to comparative statics problems; homogeneous and homothetic functions: characterizations and applications.

UNIT-III: Multi-variable optimization (12 Lectures)

Convex sets; geometric properties of functions: convex functions, their characterizations, properties and applications; further geometric properties of functions: quasi convex functions, their characterizations, properties and applications; unconstrained optimization: geometric characterizations, characterizations using calculus and applications; constrained optimization with equality constraints: geometric characterizations, lag range characterization using calculus and applications; properties of value function: envelope theorem and applications.

UNIT-IV: Differential equations (12 Lectures)

ODEs, PDEs, order and degree, first-order solving methods (like separation of variables), higher-order equations, and advanced tools like Laplace transforms.

Text books Recommended:K. Sydsaeter and P. Hammond, Mathematics for Economic Analysis, PearsonEducational Asia: Delhi, 2002.

Suggested Readings: Taro.Yamane, Mathematics for Economists, Prentice Hall New York,1970

SDG Mapping for this Course

SDG No	SDG Title	Nature of Contribution
SDG 4	Quality Education	Promotes quantitative reasoning, analytical thinking, and advanced mathematical skills essential for higher education and lifelong learning in economics and related disciplines.
SDG 8	Decent Work and Economic Growth	Develops mathematical and analytical competencies applicable in economic planning, financial analysis, policy formulation, and employment-oriented sectors.
SDG 9	Industry, Innovation and Infrastructure	Encourages innovation and research through mathematical modeling, optimization techniques, and quantitative economic analysis.
SDG 12	Responsible Consumption and Production	Mathematical optimization and resource allocation models help analyze efficient utilization of scarce resources and sustainable economic practices.

Code	Course Title	Credit	L-T-P
EC20003	Statistical methods for Economics	4	3-1-0

Course Learning Objectives:

This course begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.

Pedagogy: Classroom lectures, Problem-solving, Tutorials, Assignment, Seminars and Group discussions.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic concepts of statistical methods.

CO2: Evaluate the sampling techniques.

CO3: Understand the measures of central tendency.

CO4: Identify the measures of dispersion, skewness and kurtosis.

CO5: Analyze the correlation analysis and probability theories.

CO–PO Mapping Table

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs / POs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO4
CO1:	1	3	2	2	2	1	1	2	2	1	1	1	3	2	1	1
CO2:	1	3	2	3	3	2	1	2	2	1	2	1	2	3	2	1
CO3:	1	3	2	2	3	1	1	2	2	1	2	1	3	2	2	1
CO4:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1
CO5:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	3	2
Avg	1	3	2	2,6	2.8	1.6	1	2	2	1	1.8	1	2.8	2.6	2	1.2

Course Inputs:

UNIT-I Introduction and Overview (12 Lectures)

Basic concepts- population and sample, parameter and statistics. Data collection: Primary data and secondary data, methods of collection of primary data. Presentation of data: Diagrammatical and graphical presentation, frequency distribution, cumulative frequency and Ogive.

UNIT-II Sampling (12 Lectures)

Principal steps in a sample survey. Methods of sampling: random sampling – properties of random sampling. Role of sampling theory and sampling errors.

UNIT-III Measures of central tendency (12 Lectures)

Mean, median, mode, Geometric mean, Harmonic mean- their relative merits and demerits.

UNIT-IV Measures of Dispersion (12 Lectures)

Absolute and relative. Range, Quartile deviation, mean deviation, standard deviation, coefficient of variation- their merits and demerits. Measures of skewness and Kurtosis.

UNIT-Correlation analysis and Probability (12 Lectures)

Correlation, scattered diagram, simple correlation coefficient- Karl Pearson's correlation coefficient and its properties. Sphere man's rank correlation coefficient. Partial and multiple correlation. Probability axioms and properties- rules and types.

Textbooks:

1. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson

Education, 6th edition, 2009.

2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial

Markets and Institutions, Pearson Education, 3rd edition, 2009.

3. M. R. Baye and D. W. Jansen, Money, Banking and Financial Markets, AITBS, 1996.

Suggested readings

Rakesh Mohan, Growth with Financial Stability- Central Banking in an Emerging

Market, Oxford University Press, 2011.

https://youtu.be/NCIb69nO8MM

Notes: Latest Edition of the textbook should be used.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	The course develops quantitative, analytical and research-oriented skills through statistical methods, data analysis and interpretation, thereby enhancing quality higher education and lifelong learning competencies.
SDG 8	Decent Work and Economic Growth	Statistical tools such as sampling, correlation and probability support business analysis, economic forecasting and informed decision-making, improving employability and professional competence.
SDG 9	Industry, Innovation and	The course promotes scientific and data-driven approaches useful in research, innovation, economic planning and technological

	Infrastructure	applications in business and industry.
SDG 12	Responsible Consumption and Production	Data analysis and probability techniques contribute to efficient resource allocation, evidence-based planning and sustainable managerial decision-making.

Minor Course

Code	Course Title	Credit	L – T – P
EC22001	**Managerial Economics**	**4**	**3-1-0**

Course Learning Objectives:

This course aims to develop the understanding of the students about the managerial perspectives so that they become able to apply the economic fundamentals as aid to decision making under a given environment.

Course Learning Outcomes: On completion of this course, the students should be able to:

CO1: Understand the nature and scope of managerial economics, demand analysis and growth model of the firm.

CO2: Apply the techniques of production function and cost analysis.

CO3: Analyse the market forms and apply the pricing techniques to determine the price of factors of production.

CO4: Apply the knowledge of production function on empirical estimation and managerial uses.

CO5: Evaluate and analyze theory of cost and pricing strategies.

CO–PO Mapping Matrix

(3 = High, 2 = Medium, 1 = Low, – = No correlation)

COs ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3	1	2	3	2	1	2	2	1	2	2	3	2	1	2
CO2	3	3	3	3	3	2	2	3	2	2	3	3	3	3	2	3
CO3	3	3	3	3	3	2	2	3	2	2	3	3	3	3	3	3
CO4	3	3	3	3	3	2	2	3	2	3	3	3	3	2	3	3
CO5	3	3	3	3	3	2	2	3	2	3	3	3	3	3	3	3

Course Inputs:

UNIT I: Fundamental Concepts and Principles: (12 Hours)

Introduction to Managerial Economics; Scope and Subject matter. Basic Concepts and Techniques, Nature of Managerial and Economic Problems, Nature of Economic Analysis, Role and responsibility of managerial economic; Implicit and explicit costs.

UNIT II: Demand Analysis (12 Hours)

The demand schedule and demand curve; The demand function; Price elasticity of demand; Interpretation of elasticity of demand. Income and cross elasticity of demand; business and economic forecasting; Method of forecasting: Expert opinion; Market experiments and Surveys.

UNIT III: Theory of Production (12 Hours)

The production function; One variable input production function – Empirical estimation and managerial uses; Two-variable input production function , Isoquants – Characteristics; Features and managerial use; Formulation of a Cobb- Douglas production function.

UNIT IV: Theory of Cost and Cost Concepts (12 Hours)

Meaning and managerial use; Cost function - cost curves; Empirical estimation of a short run cost function; Cost Reduction and Control.

UNIT V: Price determination under different market forms (12 Hours)

Perfect competition; Monopolistic competition; Oligopoly- Price leadership model; Monopoly; Price discrimination

Text Book Recommended:

1. Mehta P.L., Managerial Economics Analysis, Problems and Cases (2018), Sultan Chand and Sons.

Suggested Readings:

1. Appannaiah, H.R. and Reddy, P.N. (2019) , Essentials of Managerial Economics. Himalaya Publishing House.
2. Cris Lewis W, Sudhir K. Jain, H. Craig Petersen (2015).:Managerial Economics, 4th Edition, Pearson Education, Delhi.
3. Mukherjee Sampat (2002): Business and Managerial Economics. New Central Book Agency, Calcutta.
4. Ray, C. Fair , Karl, E. Case,Sharon, E. Oster (2017), “Principles of Economics”, 12th Edition, Pearson Education, Delhi.

Note: The latest edition of the text books should be used.

SDG Mapping

SDG No.	SDG Title	Nature of Contribution

SDG 4	Quality Education	Enhances analytical, economic, and managerial decision-making skills
SDG 8	Decent Work and Economic Growth	Improves business decision-making, productivity, and economic efficiency
SDG 9	Industry, Innovation and Infrastructure	Supports efficient production and cost optimization strategies
SDG 12	Responsible Consumption and Production	Encourages optimal resource utilization and cost control
SDG 13	Climate Action	Indirect awareness through sustainable production and resource management

Multidisciplinary (MDC)	CS23001	Introduction to AI and ML	2	0	1	3

Ability Enhancement Course (AEC)	AE24001	Communicative English	2	0	0	2

Skill Enhancement Course (SEC)	EC25001	Elementary Computer Application in Presentation of Data	2	0	1	3

Course Objectives: To introduce the fundamentals of computer systems, hardware, software, and IT.

To develop basic digital skills for academic and economic applications.

To prepare students for handling data, documents, and presentations effectively.

Course Outcomes: After completion, the student will be able to:

CO1: Understand the basics of computer hardware, software, and operating systems.

CO2: Apply fundamental IT concepts to academic and economic data.

CO3: Use word processing, spreadsheet, and presentation tools for economic tasks.

CO4: Demonstrate awareness of digital resources, databases, and safe internet practices.

CO5: Evaluate the real time problem that arises with the computer application.

CO-PO-PSO Mapping

CO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	-	-	-	-	-	-	**2**	-	-	-	-	**1**	-	-	-	**2**	-

CO2:	**-**	**1**	**-**	**2**	**-**	**-**	**2**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**2**	**1**
CO3:	**-**	**-**	**-**	**-**	**-**	**-**	**3**	**-**	**1**	**2**	**-**	**-**	**-**	**-**	**-**	**3**	**1**
CO3	**2**	**-**	**-**	**-**	**-**	**-**	**2**	**-**	**-**	**-**	**2**	**1**	**-**	**-**	**-**	**2**	**-**
CO5	**-**	**-**	**-**	**2**	**-**	**-**	**2**	**-**	**-**	**-**	**-**	**2**	**-**	**-**	**-**	**2**	**-**

Course Contents

Unit 1: Fundamentals of Computers and IT (15 hours)

Basics of Computers: Characteristics, Applications in Economics, Generations of Computers. Computer Components: Hardware (Input, Output, Storage devices), Software (System & Application).

Unit 2: Operating Systems (10 hours)

Windows/Linux basics, File management. Networking & Internet: Basics of LAN, WAN, Internet, Cloud Computing.ICT in Economics: Use of e-resources, databases (RBI, NSSO, World Bank, IMF).Digital Literacy: Cyber security, plagiarism, responsible use of information.

Unit 3: Office Productivity Tools & Data Handling (15 hours)

Word Processing (MS Word/Google Docs): Formatting, tables, inserting images, citations, preparing academic/economic reports.Spreadsheets (MS Excel/Google Sheets): Data entry, formulas, functions, charts, sorting & filtering economic data, basic statistics (mean, median, correlation).Presentation Tools (MS PowerPoint/Google Slides): Creating slides, charts, and visualizations for economic reports.

Practical Exercises: Drafting an economics report in Word. Analyzing GDP/inflation data in Excel. Presenting findings in PowerPoint.

Textbooks

1. “Computer Fundamentals” – P.K. Sinha & Priti Sinha

2. “Fundamentals of Computers” – V. Rajaraman

Reference Books

1. “Computer Fundamentals and Programming in C” – Reema Thareja

2. “Introduction to Computers” – Peter Nortonl

3. “Microsoft Office 365 & Office 2019 Step by Step” – Joan Lambert & Curtis Frye

Course Outcomes	SDG 4(Quality Education)	SDG 7(Affordable & Clean Energy)	SDG 8(Decent Work & Economic Growth)	SDG 9(Industry, Innovation & Infra)	SDG 12(Responsible Consumption)	SDG 16(Peace, Justice & Strong Inst.)
CO1	2			1		

CO2	2	1	2			
CO3	2	1	3		1	
CO4	2					2
CO5	1		2	2		

Semester IV

(Include Internship / Fieldwork / Dissertation)

Code	Course Title	Credit	L-T-P
EC20002	Advanced Microeconomics	4	3-1-0

Course Learning Objectives:

Advanced Microeconomics aims to provide students with an in-depth understanding of advanced topics in microeconomic theory, building upon the foundational concepts covered in introductory microeconomics courses. The course focuses on rigorous mathematical and analytical techniques to study individual decision-making, market interactions, and strategic behaviour. Students will explore advanced topics such as general equilibrium analysis, game theory, information economics, and welfare economics, gaining insights into the complexities of economic behaviour and market outcomes. By mastering advanced microeconomic theory, students will develop the analytical skills necessary for academic research and policy analysis in economics.

Pedagogy

Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

CO1: Develop a comprehensive understanding of advanced microeconomic concepts, including general equilibrium theory, strategic interaction, and market efficiency.

CO2: Apply advanced mathematical and analytical techniques to model and analyze complex economic problems, such as asymmetric information and externalities.

CO3: Gain proficiency in using game theory to analyze strategic interactions among rational agents and predict equilibrium outcomes in various economic contexts.

CO4: Critically evaluate theoretical models and empirical evidence in microeconomic research, assessing the assumptions and implications of different economic theories.

CO5: Apply advanced microeconomic theory to analyze and evaluate real-world economic issues and policy debates, synthesizing economic concepts to inform decision-making and policy recommendations.

CO-PO Mapping Table:

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs / POs / PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO 2	PSO 3	PSO 4
CO1:	1	3	2	3	3	2	1	1	2	1	2	1	3	2	2	1
CO2:	1	3	2	3	3	3	1	2	2	1	2	1	3	3	2	1
CO3:	1	3	2	3	3	2	2	2	2	2	3	1	2	3	3	2
CO4:	2	3	3	3	3	3	1	2	2	1	2	1	3	3	2	2
CO5:	3	3	3	3	3	2	2	2	3	3	3	2	3	3	3	3
Average	**1.6**	**3.0**	**2.4**	**3.0**	**3.0**	**2.4**	**1.4**	**1.8**	**2.2**	**1.6**	**2.4**	**1.2**	**2.8**	**2.8**	**2.4**	**1.8**

Course Inputs:

UNIT-I- Demand Analysis (12 Lectures)

Theories of demand: Axiomatic Assumptions of Preference Ordering; Utility Function and its related concepts; Indifference Curve Analysis – Consumers Equilibrium; Marshallian and Hicksian demand functions; Slutsky Equation and Decomposition of price effect into substitution effect and income effect; Duality in Consumptions – Indirect Utility Function and Indirect Expenditure Function; Revealed Preference Hypothesis; Consumer's Choice under Risk and Uncertainty.

UNIT-II- Theory of Production and Costs (12 Lectures)

Production function and its related concepts; Short-run and Long-run laws of Production; Homogenous Production Function and Returns to Scale; Producer’s equilibrium and Optimal Choice of Inputs; Constrained and Unconstrained Profit Maximisation

UNIT-III- Theory of Production and Costs (12 Lectures)

Production Functions-Specification and features of Linear, Fixed Proportion, Cobb-Douglas and CES Production Functions; Duality in Production- Derivation of Supply and Cost Functions from Production Function; Cost Function-Traditional and Modern Theories of Cost.

UNIT-IV- Price and Output Determination under Monopoly and Monopolistic

Market Structures (12 Lectures)

Price and Output Determination under Different Market Structures: Perfect Competition, Monopoly – Short-run and Long-run Equilibrium, Monopoly Power, Control and Regulation; Discriminating Monopolist; Monopolistic Competition– Short-run and Long-run Equilibrium.

UNIT-V- Price and Output Determination under Duopoly and Oligopoly market (12 Lectures)

Non-price Competition; Price and Output Determination under Non-collusive and Collusive Duopoly and Oligopoly: Non-collusive Models–Cournot, Stackelberg and Kinked Demand Curve Models; Collusive Models – Cartels and Mergers, Market Share, Price Leadership Models.

Textbooks:

1.Nicholson, W., and Snyder, C (2008) Micro economic Theory: Basic Principles and Extensions, Cengage learning, New Delhi.

2.N. Gregory Mankiw, (2018), Principles of Microeconomics, Australia; Boston, MA: Cengage Learning

Suggested readings:

1.Maddala, G.S.and Miller, E(2004), Micro Economics: Theory and Application, Tata Mc Graw Hill,New Delhi.

2.Pyndyck, R.S.andD.L.Rubinfeld (1999),Microeconomics, (3rdEdition) Pentice Hall of India.

3.Fransico. Stigler,G.(1996),Theory of Price, (4thEdition), Prentice Hall of India, NewDelhi. Varian, H.(2000), Microeconomics Analysis,W.W. Norton, New York.

4.Gravelle, HandRees,R (1992) Micro Economics, Person Education U.K.

5.Varian, H.R. (1992), Micro Economic Analysis, WW Norton and co, New York.

6.Das Ramesh (2017), MicroEconomics: Theory and Practice, (Second Edition), Kunal Books, New Delhi

7.https://youtu.be/ijHvcQFdBBU

Notes: Latest Edition of the textbook should be used.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Strengthens analytical, mathematical, and research skills in economics, promoting higher-order thinking, employability, and lifelong learning among students.
SDG 8	Decent Work and Economic Growth	Analyses labour markets, firm behaviors, market structures, and productivity, supporting understanding of employment generation and sustainable economic growth.
SDG 10	Reduced Inequalities	Studies consumer behaviors, income distribution, and market imperfections to address inequality through policy and welfare economics tools.
SDG	Responsible	Applies consumer theory, utility analysis, and production efficiency to

12	Consumption and Production	promote optimal resource use and sustainable production decisions.

Code	Course Title	Credit	L-T-P
EC20004	Advanced Macroeconomics	4	3-1-0

Course Learning Objectives:

This course is designed with the objective to familiarize the students with the concepts and issues in advanced macroeconomics, as is applied in theory and practice across the world. The course will acquaint the students with the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like consumption function, investment function, aggregate demand and aggregate supply, inflation, trade cycles and open economy models. By mastering advanced macroeconomic theory, students will develop the analytical skills necessary for academic research and policy analysis in economics.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

On successful completion of the course, the students will be able to:

CO1: Understand Keynes's psychological laws of consumption function and different theories of consumption function.

CO2: Possess deeper knowledge of investment behaviour.

CO3: Develop a comprehensive knowledge on derivation of aggregate demand and aggregate supply curves in the IS-LM framework.

CO4: Evaluate the concept of inflation, Philips curve, trade cycles and its implications on economy.

CO5: Analyze open economy models and balance of payments.

CO-PO Mapping Table:

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation).

COs / POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	1	3	2	2	2	1	1	1	2	1	1	1	3	2	2	1
CO2	1	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1
CO3	1	3	2	3	3	2	1	2	2	1	2	1	3	3	3	1
CO4	2	3	2	3	3	2	1	1	2	2	2	2	3	3	3	2
CO5	1	3	3	3	3	2	1	2	2	2	2	2	3	3	3	2
Avg.	1.2	3.0	2.2	2.8	2.8	1.8	1.0	1.4	2.0	1.4	1.8	1.4	3.0	2.8	2.6	1.4

Course Inputs:

UNIT-I

Consumption Function and Income consumption relationship (12 Lectures)

Keynes' Psychological Law of Consumption: Implications of the law, Short-run and long-run

Consumption function and Determinants; Absolute income hypothesis, Relative income hypothesis, Life cycle hypothesis and Permanent income hypothesis.

UNIT-II

Investment Function (12 Lectures)

Types of Investment, Investment function, determinants, Investment multiplier, Theories of investment and accelerator, Super multiplier, Influence of policy measures on investment.

UNIT-III

Aggregate Demand and Aggregate Supply (12 Lectures)

Derivation of Aggregate Demand and Aggregate Supply Curves in the IS-LM Framework; Nature and Shape of IS and LM curves; Interaction of IS and LM curves and Determination of Employment, Output, Prices and Investment.

UNIT-IV

Inflation and Trade Cycles (12 Lectures)

Inflation – Unemployment Trade off and the Phillips Curve – Short run and Long run Analysis; Meaning and Characteristics of Trade Cycles; Hawtrey's Monetary Theory, Hayek's Over-investment Theory and Keynes' views on Trade Cycles

UNIT-V (12 Lectures)

Open Economy Models

Short-run open economy models; Mundell-Fleming model; exchange rate determination; Purchasing power parity; Balance of payments-meaning, monetary approach to balance of payments, international financial markets.

Textbooks:

1. N. Gregory Mankiw (2018): Principles of Macroeconomics, Australia; Boston, MA: Cengage Learning India Private Limited, New Delhi

Suggested Readings:

1. Abel, A., Bernanke, B. (2016). Macroeconomics, 9th ed. Pearson Education.

2. Blanchard, O. (2018). Macroeconomics, 7th ed. Pearson Education. 3. Branson, W. (2013). Macroeconomics: Theory and policy, 3rd ed, East West

3. Richard T. Froyen (2005): Macroeconomics, 2nd Edition, Pearson Education Asia, New Delhi.

4. Errol D'Souza (2009): Macroeconomics, Pearson Education Asia, New Delhi.

5. Dornbusch, Fischer and Startz, Macroeconomics. McGraw Hill, 11th edition,2010.

6.https://youtu.be/RO5HZkMyCxk

Notes: Latest Edition of the textbook should be used.

SDG Mapping for the Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	The course develops advanced analytical, research and critical thinking skills in macroeconomics through theoretical and practical learning approaches.
SDG 8	Decent Work and Economic Growth	Study of investment behaviour, aggregate demand and supply, trade cycles and employment theories promotes understanding of sustainable economic growth and productive employment generation.
SDG 10	Reduced Inequalities	Analysis of inflation, unemployment and income distribution enhances awareness regarding economic inequalities and policy interventions for balanced growth.
SDG 12	Responsible Consumption and Production	Consumption theories and macroeconomic policy discussions encourage understanding of sustainable consumption patterns and efficient resource utilization.

Code	Course Title	Credit	L-T-P
EC20006	Money and Banking: Theory and Practice	4	3-1-0

Course Learning Objectives:

This course exposes students to the theory and functioning of the monetary and banking sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic concepts of money.

CO2: Understand the Quantity theory of money.

CO3: Evaluate the theories of interest rate determination

CO4: Identify the origin and growth of banking system.

CO5: Analyze the concept of central banking and monetary policy.

CO-PO Mapping Table:

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation

COs \ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1:	1	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1
CO2:	1	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1
CO3:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	2
CO4:	1	3	2	2	2	1	1	2	2	1	2	1	3	2	1	1
CO5:	2	3	3	3	3	2	2	2	2	2	3	2	3	3	3	2
Avg	**1.2**	**3.0**	**2.2**	**2.6**	**2.6**	**1.6**	**1.2**	**1.6**	**2.0**	**1.2**	**2.0**	**1.2**	**3.0**	**2.6**	**1.8**	**1.4**

Course Inputs:

UNIT-I Money (12 Lectures)

Concept, functions, measurement; theories of money supply determination.

UNIT-II Quantity theory of Money (12 Lectures)

Crude and sophisticated versions, Fisher's transactions approach- its implications. Cambridge cash balance approach and the comparison between the two.

UNIT-III Interest Rates (12 Lectures)

Determination; sources of interest rate differentials; theories of term structure of

interest rates; interest rates in India.

UNIT-IV Banking system (12 Lectures)

Origin and growth of banking.

Indian banking system: changing role and structure of commercial bank.

UNIT-V. Central Banking and Monetary Policy (12 Lectures)

Functions, balance sheet; goals, targets, indicators and instruments of monetary

control; monetary management in an open economy; current monetary policy of India.

Textbooks:

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, PearsonEducation, 6th edition, 2009.

2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of FinancialMarkets and Institutions*, Pearson Education, 3rd edition, 2009.

3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets,* AITBS,1996.

Suggested Readings

Rakesh Mohan, Growth with Financial Stability- Central Banking in an Emerging

Market, Oxford University Press, 2011.

https://youtu.be/rZ0uI8VjWZc

Notes: Latest Edition of the textbook should be used.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Development of practical economic knowledge, research skills, analytical thinking and lifelong learning.
SDG 8	Decent Work and Economic Growth	Practical exposure to economic policy analysis, employability skills, internships and professional competence.
SDG 9	Industry, Innovation and Infrastructure	Application of economic tools, research methods and data analysis for innovation and policy formulation.
SDG 10	Reduced Inequalities	Field-based understanding of socio-economic disparities and evidence-based policy recommendations for inclusive development.
SDG 17	Partnerships for the Goals	Collaboration with academic institutions, government agencies, communities and organizations during practicum and research projects.

Minor Course:

Code	Course Title	Credit	L-T-P
EC22002	Fundamentals of Money and Banking	**4**	**3-1-0**

Course Learning Objectives:

This course exposes students to the theory and functioning of the monetary and banking sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the basic concepts of money.

CO2: Understand the Quantity theory of money.

CO3: Evaluate the theories of interest rate determination

CO4: Identify the origin and growth of the banking system.

CO5: Analyze the concept of central banking and monetary policy.

CO-PO Mapping Table:

(Rate correlations: 1 - Weakly Mapped, 2 - Moderately Mapped, 3 - Strongly Mapped, "_" - No Correlation

COs \ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1:	1	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1
CO2:	1	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1
CO3:	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	2
CO4:	1	3	2	2	2	1	1	2	2	1	2	1	3	2	1	1
CO5:	2	3	3	3	3	2	2	2	2	2	3	2	3	3	3	2
Avg	**1.2**	**3.0**	**2.2**	**2.6**	**2.6**	**1.6**	**1.2**	**1.6**	**2.0**	**1.2**	**2.0**	**1.2**	**3.0**	**2.6**	**1.8**	**1.4**

Course Inputs unit wise

UNIT-I Money **(12 hours)**

Concept, functions, measurement; theories of money supply determination.

UNIT-II Quantity theory of Money **(12 hours)**

Crude and sophisticated versions, Fisher's transactions approach- its implications. Cambridge cash balance approach and the comparison between the two.

UNIT- III Interest Rates **(12 hours)**

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

UNIT-IV Banking system **(12hours)**

a) Origin and growth of banking.
b) Indian banking system: changing role and structure of commercial bank.

UNIT-V. Central Banking and Monetary Policy **(12 hours)**

Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

Textbooks:

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.

2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.

3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets,* AITBS, 1996.

4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market,* Oxford University Press, 2011.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Development of practical economic knowledge, research skills, analytical thinking and lifelong learning.
SDG 8	Decent Work and Economic Growth	Practical exposure to economic policy analysis, employability skills, internships and professional competence.
SDG 9	Industry, Innovation and Infrastructure	Application of economic tools, research methods and data analysis for innovation and policy formulation.
SDG 10	Reduced Inequalities	Field-based understanding of socio-economic disparities and evidence-based policy recommendations for inclusive development.
SDG 17	Partnerships for the Goals	Collaboration with academic institutions, government agencies, communities and organizations during practicum and research projects.

Ability Enhancement Course (AEC)	AE24002	Professional Communication	2	0	0	2

Code	Course Title	Credit	L-T-P
SE20082	Seminar	2	0-0-4

Semester V

Code	Course Title	Credit	L-T-P
EC30001	International Economics	4	3-1-0

Course Learning Objectives:

International Economics helps to identify and analyse the international economic tractions that lead to intra –country and inter country allocation of scarce resources. Study of International economics helps in gaining a complete and comprehensive understanding of internal and external economic policies adopted by different countries and their effect on foreign trade.

Pedagogy: Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Acquire a deeper understanding about national and international trade.

CO2: Possess knowledge of different theories of international trade.

CO3: Understanding about the gains from trade and trade as an engine of economic growth.

CO4: Acquire knowledge about different types of tariffs and quotas.

CO5: Develop an idea about balance of payments.

CO-PO-PSO Mapping

Mapping Scale: 1 – Weakly Mapped (Low) , 2 – Moderately Mapped (Medium) 3 – Strongly Mapped (High)

COs/POs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	1	3	2	3	3	1	1	1	2	1	2	1	3	2	2	1	1
CO2	1	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1	2
CO3	2	3	2	3	3	2	1	1	2	1	2	2	3	3	3	2	2
CO4	2	3	2	3	3	2	1	1	2	2	3	2	2	3	3	2	2
CO5	1	3	2	3	3	2	1	2	2	1	3	2	3	3	2	1	3
Avg.	1.4	3	2	3	3	1.8	1	1.2	2	1.2	2.4	1.6	2.8	2.8	2.4	1.4	2

Course Inputs:

UNIT-I (12 Lectures)

Importance of International Trade and trade theories

Importance of the study of international economics. Inter-Regional and international Trade. Difference between interregional and international trade. .Smith's Theory of of Absolute Advantage, Ricardo's Theory of Comparative Difference in costs.

UNIT-II

Theory of International Trade (12 Lectures)

Modern Trade theory-Heckscher-Ohlin theory of trade, Leontief paradox, Theorem of factor price equalization, Stolper-Samuelsson's Factor Price Equalization Theorem, Rybczynski theorem, Technological change and international trade.

UNIT-III Gains and terms of trade(12 Lectures)

Meaning, Potential and Actual Gains from International trade. Measurement of gains from trade. Factors determining the Gains from trade. Gains from trade and income distribution; Concept of terms of trade, their uses and limitations, Gains from trade and income Distribution. Trade as an engine of economic growth.

UNIT-IV Tariffs(12 Lectures)

Meaning and Types, Effects of Tariffs. Effects of a Tariff in a large country. Quotas and Non-tariff barriers; effects of tariffs under partial and general equilibrium perspectives; tariff and income distribution; Optimum tariff; Types of regional economic integration; Theory of customs union.

UNIT-VBalance of Payments(12 Lectures)

Meaning and components of Balance of Payments; Equilibrium and disequilibrium in the Balance of Payments; Devaluation and Balance of Payments adjustment; Foreign trade multiplier with and without foreign repercussions.

Textbooks Recommended:

Bo Sodersten, Geoffrey Reed, (1994), International Economics, Palgrave Macmillan

Mithani, D.M. (2013, (6thEdition). International Economics, Himalaya Publishing House.

Krugman, P.R. (2018), International Economics: Theory and Policy (11th Edition), Marc Melitz, Harvard University

Salvatore, Dominick, (2013), International Economics: Trade and Finance, John Wiley &Sons..

Krugman, Paul R. and Obstfeld, Maurice (2014), International Trade: Theory and Policy, Prentice Hall.

Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge, university Press, Massachusetts

Suggested Readings

Bo Sodersten, Geoffrey Reed, (1994), International Economics, Palgrave Macmillan

Mithani, D.M. (2013, (6thEdition). International Economics, Himalaya Publishing House.

Notes: Latest Edition of the textbook should be used.

SDG Mapping with this Course

SDG No.	SDG Goal	Relevance with Course	Level of Mapping
SDG 1	No Poverty	International trade and economic integration contribute to employment generation and poverty reduction.	Moderate

SDG 4	Quality Education	Enhances analytical, research, and policy understanding in international economics and trade.	High
SDG 8	Decent Work and Economic Growth	Trade theories and globalization explain economic growth, employment, and market expansion.	High
SDG 10	Reduced Inequalities	The course analyses income distribution effects and inequalities arising from international trade.	Moderate
SDG 12	Responsible Consumption and Production	Trade policies and global production systems are linked with sustainable consumption practices.	Moderate

Course Learning Objectives:

Code	Course Title	Credit	L-T-P
EC30003	Public Economics	4	3-1-0

The importance of public finance is how the society can get maximum social benefit. Besides the revenue and expenditure activities of the public authorities, public finance also studies how and when government raises public debt, manage financial administration of the government and maintains stability and growth of the economy.

Pedagogy: Classroom lectures, Problem-solving, Tutorials, Assignment, Seminars and Group discussions.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Acquire a deeper understanding about public revenue, Public expenditure.

CO2: Possess knowledge of why public expenditure increases in a modern state.

CO3: Understanding about different sources of public revenue of government.

CO4: Acquire knowledge about different types of budget and how budget deficits are controlled.

CO5: Develop an idea about instruments of fiscal policy and objectives of fiscal policy.

CO-POMapping

Correlation Levels: 3 = High, 2 = Moderate, 1 = Low and '–' = No Correlation

COs/POs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	1	3	2	2	3	1	1	1	1	1	1	2	3	2	1	1	1
CO2	1	3	2	3	3	1	1	1	1	1	1	2	3	2	2	1	1
CO3	1	3	2	2	3	2	1	1	1	1	1	1	3	3	2	1	2
CO4	1	3	2	3	3	2	1	1	1	1	2	2	2	3	2	2	3
CO5	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	2	3
Average	**1.2**	**3**	**2**	**2.6**	**3**	**1.6**	1.0	1.0	1.2	1.0	1.4	1.8	2.8	2.6	1.8	1.6	

Course Inputs:

UNIT-I

Public Finance –An Introduction (12 Lectures)

Introduction-Origin of Public Finance, Meaning, Scope. Distinction between Private and Public Finance, Major Fiscal Functions. Principle of Maximum Social Advantage. Musgrave's views on principles of Maximum Social Advantage.

UNIT-II

Public Expenditure (12 Lectures)

Introduction, Meaning and scope, Difference between public and Private Expenditure, Aims of public Expenditure. Theories of Public Expenditure Pigous Ability to Pay Theory , Benefit Principles, Wagner's law of increasing state activities, Peacock Wiseman hypothesis

UNIT-III

Public Revenue (12 Lectures)

Sources of public Revenue ,Taxation ,meaning, cannons and classification of Taxes.impact and incidence of taxes, Division of tax burden, the benefit and ability to pay approaches, taxable capacity, effects of taxation, characteristics of a good tax system, major tends in tax revenue of central and state government in India.

UNIT-IV

Public Budget (12 Lectures)

Public budget: kinds of budget, economic and functional classification of budget. Balanced and unbalanced budget. Balanced budget multiplier. Budget as an instrument of economic policy. Different concepts of budget deficit. Budgetary deficits and its implications.

UNIT-V

Fiscal policy(12 Lectures)

Introduction, meaning of fiscal policy, objectives of fiscal policy in developing countries. Modern view on fiscal policy, Keynes views on fiscal policy. Instruments of fiscal policy.

Textbooks Recommended:

Atkinson, A.B. andJ.E.Siglitz(1980), LecturesonPublicEconomics,TataMcGrawHill,NewYork.

Buchanan,J.M.(1970).ThePublicFinances;RichardD.Irwin,Homewood.

Goode,R.(1986),GovernmentFinanceinDevelopingCountries,TataMcGrawHill,NewDelhi.

Musgrave,R.A.(1959),TheTheoryofPublicFinance,TataMcGrawHill,Kogakhusa,Tokyo.

Musgrave,R.A.andP.B.Musgrave(1976).PublicFinanceintheoryandPractice,McGrawHill, Kogakusha, Tokyo.

Herber, B.P. (1967), ModernPublicFinance,RichardD.Irwin,Homewood.

Mueller, D.C. (1979) Public Choice, CambridgeUniversityPress,Cambridge.Duff, L.(1997),GovernmentandMarket, OrientLongman, NewDelhi.

Mishan,E.J.(1982),CostBenefitAnalysis:AninformalIntroductionGeorgeAllenandUnwin,London.

Bird,R.andO.Oldman(1967),ReadingsonTaxationinDevelopingCountries,theJohnHopkinsUniversityPress, Baltimore.

Barman,K.(1986).PublicDebtManagementinIndia,UppalPublishingHouse,NewDelh

Suggested Readings

Chelliah,RajaJ.etal.(1981),TrendsandIssues in India'sFederalFinance,NationalInstituteofPublicFinanceandPolicy,New Delhi.

Musgrave,R.A.(1977), EssaysinFiscalFederalism,GreenwoodWestPort

https://youtu.be/PWGQnE5gjsI

Notes: Latest Edition of the textbook should be used.

SDG Mapping with this Course

Unit	Topics	Relevant SDGs

Unit I	Public Finance and Social Welfare	SDG 1: No Poverty, SDG 10: Reduced Inequalities
Unit II	Public Expenditure	SDG 3: Good Health and Well-being, SDG 4: Quality Education
Unit III	Taxation and Revenue	SDG 8: Decent Work and Economic Growth, SDG 16: Peace, Justice and Strong Institutions
Unit IV	Public Budget	SDG 9: Industry, Innovation and Infrastructure, SDG 16
Unit V	Fiscal Policy	SDG 8, SDG 12: Responsible Consumption and Production, SDG 13: Climate Action

Course

Code	Course Title	Credit	L-T-P
EC30005	Indian Economy: Policies & Performances	4	3-1-0

Learning Objectives:

Indian Economy: Policies & Performances aims to provide students with a comprehensive understanding of the Indian economy, focusing on its policies, performances, and challenges. The course explores the evolution of India's economic policies, the impact of globalization and liberalization, and key sectors driving economic growth. Students will analyse macroeconomic indicators, sectoral performances, and policy responses to address socio-economic issues. By the end of the course, students will be equipped with the knowledge to assess the Indian economy's current state and contribute to informed decision-making and policy recommendations.

Pedagogy:Lectures, Case Studies, Assignments, Projects, Seminars

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Develop a comprehensive understanding of the evolution of Indian economic policies and reforms.

CO2: Analyze macroeconomic indicators and sectoral performances to assess the overall health of the Indian economy.

CO3: Understand the challenges and opportunities in different sectors of the Indian economy and their implications for policy-making.

CO4: Evaluate the effectiveness of government policies and interventions in addressing socio-economic issues and promoting economic growth.

CO5: Apply economic reasoning and analytical tools to analyze real-world economic phenomena and formulate evidence-based policy recommendations for sustainable development in India.

CO-PO Mapping

Mapping Scale: **1** – Weakly Mapped (Low) , **2** – Moderately Mapped (Medium) **3** – Strongly Mapped (High)

COs / POs & PSOs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO1 0**	**PO1 1**	**PO1 2**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**
CO1	1	3	2	2	2	1	1	1	1	–	1	2	3	2	1	1	1
CO2	1	3	2	3	3	2	–	1	1	–	1	2	3	3	2	1	2
CO3	1	3	2	3	3	2	1	1	1	1	2	2	3	3	2	2	2
CO4	2	3	2	3	3	2	1	1	1	1	2	3	2	3	3	2	3
CO5	2	3	3	3	3	3	1	2	2	2	2	3	2	3	3	2	3
Average	**1.4**	**3**	**2.2**	**2.8**	**2.8**	**2**	**0.8**	**1.2**	**1.2**	**0.8**	**1.6**	**2.4**	**2.6**	**2.8**	**2.2**	**1.6**	**2.2**

Course Inputs:

UNIT-I Introduction to Indian Economy (12 Lectures)

Major features of the economy at independence; Basic features of Indian Economy; Indian Economy as a developing economy; sustainability and regional contrasts; structural change, savings and investment.

UNIT-II Population and Human Development (12 Lectures)

Demographic trends and issues; Occupational structure; Sex composition; education; health and malnutrition.

UNIT-III Growth and Distribution (12 Lectures)

Trends and policies in poverty; inequality and unemployment

UNIT-IVNational Income in India (12 Lectures)

National income: trends, Sectoral composition

UNIT-V: Policies and performances of Indian Agriculture (12 Lectures)

Role of agriculture in Indian economy, Causes of low productivity, Green revolution and Land reforms.

Textbooks Recommended:

Ramesh Singh. Indian Economy: Performance and Policies.

Uma Kapila. Indian Economy.

Suggested Readings:

Gurcharan Das. India Unbound.

Academic articles from journals such as Economic and Political Weekly, Reserve Bank of India publications, and Ministry of Finance reports.

https://youtu.be/PEisRhAPGpY

Notes: Latest Edition of the textbook should be used.

SDG Mapping with Course

Unit/Course Component	SDG	Level (3/2/1)	Justification
Population and Human Development	SDG 3: Good Health and Well-Being	3	Focus on health, nutrition and human development indicators.
Education and Human Development	SDG 4: Quality Education	3	Examines educational development and human capital formation.
Poverty, Inequality and Employment	SDG 1: No Poverty	3	Directly addresses poverty reduction and welfare policies.
Poverty, Inequality and Employment	SDG 10: Reduced Inequalities	3	Studies income distribution and inequality issues.
Growth, Employment and Economic Performance	SDG 8: Decent Work and Economic Growth	3	Focus on economic growth, employment and productivity.
Agriculture, Land Reforms and Green Revolution	SDG 2: Zero Hunger	3	Agriculture leads to increase food production.

Code	Course Title	Credit	L-T-P
EC30007	Digital Economy and Data Analytics	4	3-1-0

Course Learning Objectives:

Computer Applications for Economic Analysis introduces students to the use of computer software and tools for analysing economic data, conducting statistical analysis, and building economic models. The course aims to equip students with practical skills in using software packages commonly employed in economic research and analysis. Through hands-on exercises and projects, students will learn to manipulate data, visualize results, and perform econometric analysis. By the end of the course, students will be proficient in applying computer applications to solve real-world economic problems and conduct empirical research.

Pedagogy: Lectures, Computer Lab Sessions, Hands-on Exercises, Projects, Case Studies

Course Inputs:

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Demonstrate proficiency in using computer software and tools for economic data analysis, visualization, and modelling.

CO2: Apply statistical techniques and econometric methods to analyze economic data and test economic hypotheses.

CO3: Develop skills in programming languages commonly used in economic research and analysis.

CO4: Design and conduct empirical research projects using computer applications to address real-world economic problems.

CO5: Communicate research findings effectively through written reports and oral presentations.

CO-PO-PSO Mapping

COs/POs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO10**	**PO11**	**PO12**	**PSO 1**	**PSO 2**	**PSO 3**	**PSO 4**	**PSO 5**
CO1	1	3	2	2	3	2	1	3	2	1	2	1	2	2	2	1	3
CO2	1	3	2	3	3	3	1	2	2	1	2	1	3	3	2	1	3
CO3	1	2	1	2	3	2	1	3	2	1	2	1	2	2	2	1	3
CO4	2	3	3	3	3	3	2	2	2	2	3	2	2	3	3	2	3
CO5	2	2	3	2	2	1	1	1	2	2	2	2	2	2	2	2	2
Average	**1.4**	**2.6**	**2.2**	**2.4**	**2.8**	**2.2**	**1.2**	**2.2**	**2**	**1.4**	**2.2**	**1.4**	**2.2**	**2.4**	**2.2**	**1.4**	**2.8**

Mapping Scale: 1 – Weakly Mapped (Low), 2 – Moderately Mapped (Medium)and 3 – Strongly Mapped (High)

Course Inputs:

Unit I: Introduction to Computer Applications in Economics (12 Lectures)

Overview of computer software and tools used in economic analysis

Introduction to programming languages commonly used in economics (e.g., R, Python)

Basics of data manipulation and management using spreadsheet software (e.g., Microsoft Excel)

Unit II: Data Analysis and Visualization (12 Lectures)

importing and cleaning data from various sources

Descriptive statistics: Measures of central tendency, dispersion, and visualization techniques

Exploratory data analysis: Histograms, scatter plots, and box plots

Data visualization using software packages like Tableau or plot in R

Unit III: Econometric Analysis (12 Lectures)

Introduction to econometric software packages (e.g., STATA, EViews)

Simple and multiple regression analysis

Hypothesis testing and interpretation of regression results

Advanced topics in econometrics: Time series analysis, panel data analysis, and instrumental variables

Unit IV: Economic Modeling and Simulation (12 Lectures)

Introduction to agent-based modelling and system dynamics

Building and simulating economic models using software like NetLogo or Any Logic

Analysing model outputs and interpreting simulation results

Applications of economic modelling in policy analysis and forecasting

Unit V: Project Work and Presentation (12 Lectures)

Group or individual projects applying computer applications to analyze real-world economic data or research questions

Presentation of project findings and methodologies

Peer review and feedback sessions to enhance analytical and presentation skills

Textbooks Recommended:

Wooldridge, J. M. (2019). Introductory Econometrics: A Modern Approach. Cengage Learning.

Stock, J. H., & Watson, M. W. (2019). Introduction to Econometrics. Pearson.

Suggested Software Resources:

R: Comprehensive R Archive Network (CRAN) - cran.r-project.org

Python: Anaconda Distribution - www.anaconda.com

STATA: StataCorp LLC - www.stata.com

EViews: IHS Markit - www.eviews.com

Notes: Latest versions of the software packages and textbooks should be used.

SDG Mapping with Course

Course Unit	Relevant SDG	Level (3/2/1)	Justification

Data Analysis & Visualization	SDG 4: Quality Education	3	Develops analytical and digital competencies.
Econometric Analysis	SDG 8: Decent Work and Economic Growth	3	Supports evidence-based economic analysis and policy evaluation.
Economic Modeling & Simulation	SDG 9: Industry, Innovation and Infrastructure	3	Encourages technological innovation and computational modeling.
Policy Analysis Applications	SDG 16: Peace, Justice and Strong Institutions	2	Promotes data-driven policy formulation and governance.
Research Projects Using Economic Data	SDG 17: Partnerships for the Goals	2	Encourages collaborative and interdisciplinary research.
Sustainability-related Economic Modeling	SDG 13: Climate Action	2	Can be applied to environmental and climate policy assessment.

Minor Course (Sinlge and Double)

Course Learning Objectives

Code	Course Title	Credit	L-T-P
EC32001	Indian Economy	**4**	**3-1-0**

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Develop the knowledge about the basic features of Indian Economy.

CO2: Understand the trends in demographic issues.

CO3: Evaluate the trends and policies of poverty inequality and unemployment.

CO4: Identify the concept of national income and sectoral composition.

CO5: Analyze the growth and productivity of agriculture.

CO-PO Mapping

Mapping Scale: **1** – Weakly Mapped (Low) , **2** – Moderately Mapped (Medium) **3** – Strongly Mapped (High)

COs / POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	1	3	2	2	2	1	1	1	1	–	1	2	3	2	1	1	1
CO2	1	3	2	3	3	2	–	1	1	–	1	2	3	3	2	1	2
CO3	1	3	2	3	3	2	1	1	1	1	2	2	3	3	2	2	2
CO4	2	3	2	3	3	2	1	1	1	1	2	3	2	3	3	2	3
CO5	2	3	3	3	3	3	1	2	2	2	2	3	2	3	3	2	3
Average	**1.4**	**3**	**2.2**	**2.8**	**2.8**	**2**	**0.8**	**1.2**	**1.2**	**0.8**	**1.6**	**2.4**	**2.6**	**2.8**	**2.2**	**1.6**	**2.2**

Course Input unit wise

UNIT-I Introduction to Indian Economy (12 hours)

Major features of the economy at independence; Basic features of Indian Economy; Indian Economy as a developing economy; sustainability and regional contrasts; structural change, savings and investment.

UNIT-II Population and Human Development (12 hours)

Demographic trends and issues; Occupational structure; Sex composition; education; health and malnutrition.

UNIT-III Growth and Distribution (12 hours)

Trends and policies in poverty; inequality and unemployment

UNIT-IV National Income in India (12 hours)

National income: trends, sectoral composition

UNIT-V Policies and performances of Indian Agriculture (12 hours)

Role of agriculture in Indian economy, Causes of low productivity, green revolution and Land reforms.

Textbooks:

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013.*An Uncertain Glory: India and its Contradictions*, Princeton University Press.

3. Rakesh Mohan, 2008, ―Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.

4. S.L. Shetty, 2007, ―India ‘s Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India’s Development*.

5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and*

Political Weekly, January.

7. Himanshu. 2011, ―Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.

SDG Mapping with Course

Unit/Course Component	SDG	Level (3/2/1)	Justification
Population and Human Development	SDG 3: Good Health and Well-Being	3	Focus on health, nutrition and human development indicators.
Education and Human Development	SDG 4: Quality Education	3	Examines educational development and human capital formation.
Poverty, Inequality and Employment	SDG 1: No Poverty	3	Directly addresses poverty reduction and welfare policies.
Poverty, Inequality and Employment	SDG 10: Reduced Inequalities	3	Studies income distribution and inequality issues.
Growth, Employment and Economic Performance	SDG 8: Decent Work and Economic Growth	3	Focus on economic growth, employment and productivity.
Agriculture, Land Reforms and Green Revolution	SDG 2: Zero Hunger	3	Agriculture leads to increase food production.

Code	Course Title	Credit	L – T – P
EC32003	**Economics of Growth and Development (Double Minor)**	**4**	**3-1-0**

Course Objectives: This course offers an examination of theories, policies, and empirical evidence related to economic growth and development. Key concepts such as economic growth models, poverty alleviation strategies, human capital development, and institutional frameworks are covered. Emphasis is on understanding the complexities and challenges of fostering sustainable development.

Course Learning Outcomes: On successful completion of this course the students will be able to:

CO1: To Understand various theories of economic growth and development including classical, neoclassical, and modern approaches.

CO2: To Analyze macroeconomic, industrial, and trade policies and their role in economic growth and development.

CO3: To Evaluate the role of human capital, education, healthcare, inequality, and poverty in inclusive economic development.

CO4: To Examine the role of institutions, governance, and political economy in shaping development outcomes.

CO5: To Assess the relationship between economic development and environmental sustainability and analyze policy responses for sustainable development.

CO-PO-PSO Mapping Matrix:

Course Outcomes ↓	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4
CO1	3	3	2	2	1	1	1	1	2	1	2	2	2	2	1	1
CO2	3	3	3	2	2	2	2	2	2	2	2	2	3	2	2	2
CO3	2	3	2	2	2	3	2	2	2	2	2	2	3	3	2	2
CO4	3	3	3	3	2	2	2	2	2	2	3	2	2	2	2	3
CO5	3	3	3	3	2	3	3	2	2	2	2	3	2	2	2	2

Course Inputs:

U**nit I: Theories of Economic Growth and Development (12 Hours)**

Classical, neoclassical, and contemporary theories of economic growth and development, including the Solow model, endogenous growth theory, and structuralist perspectives.

Unit II: Policies for Economic Growth and Development (12 Hours)

Macroeconomic policies, industrial policies, and trade policies in fostering economic growth and development. The role of international institutions in shaping development policies.

Unit III: Human Capital Development and Inclusive Growth (12 Hours)

Human capital development, education, and healthcare in promoting inclusive growth. The impact of income inequality and poverty on economic development.

Unit IV: Institutions, Governance, and Development (12 Hours)

Institutions, governance structures, and political economy factors in shaping economic development trajectories. Strategies for institutional reform and governance improvement.

Unit V: Environmental Sustainability and Development (12 Hours)

The interplay between economic development and environmental sustainability. Policy responses for achieving sustainable development goals.

Textbook Recommended:

1. Todaro, M. P., & Smith, S. C. (2020). Economic Development (13th ed.). Pearson.

Suggested Readings:

1. Sen, A. (1999). Development as Freedom. Oxford University Press.

2. Acemoglu, D., & Robinson, J. A. (2012). Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Crown Business.

SDG Mapping:

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Promotes knowledge of human capital development
SDG 8	Decent Work and Economic Growth	Focus on economic growth policies and employment generation
SDG 10	Reduced Inequalities	Addresses poverty, inequality, and inclusive growth
SDG 13	Climate Action	Emphasizes environmental sustainability in development policies

Code	Course Title	Credit	L – T – P
EC32005	**Economics of Social Sector**	**4**	**3-1-0**

Course Objectives: This course explores the economics of the social sector, focusing on the allocation, distribution, and impact of resources in areas such as education, healthcare, and social welfare. It examines the role of government policies, market forces, and social institutions in addressing social challenges and improving human well-being. Emphasis is placed on understanding the economic principles, theories, and empirical evidence relevant to the social sector.

Course Learning Outcomes: On successful completion of this course the students will be able to:

CO1: Understand the economic principles and theories related to the social sector, especially education, healthcare, and welfare.

CO2: Analyze the allocation and distribution of resources in education and healthcare sectors.

CO3: Evaluate social welfare policies, income distribution, and poverty alleviation programs.

CO4: Examine the role of public policy and government interventions in improving social development and human well-being.

CO5: Apply evaluation techniques such as cost-benefit analysis and impact assessment to measure the effectiveness of social sector programs.

CO–PO-PSO Mapping Matrix:

Course Outcomes ↓	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4
CO1	3	2	2	2	1	1	1	1	1	1	2	2	2	1	1	1
CO2	3	3	3	2	2	1	1	1	2	1	2	2	3	2	2	2
CO3	3	3	3	3	2	2	1	2	2	2	2	2	3	3	2	2
CO4	3	3	2	3	2	2	2	2	2	2	3	2	2	2	2	3
CO5	3	3	3	3	3	2	2	2	2	3	2	3	2	2	2	2

Course Inputs:

Unit I: Economics of Education (12 Hours)

Examine the economic principles and theories relevant to education, including investment in human capital, returns to education, and education production functions.

Unit II: Economics of Healthcare (12 Hours)

Study the allocation and distribution of healthcare resources, including healthcare markets, health insurance, and healthcare financing mechanisms.

Unit III: Economics of Social Welfare (12 Hours)

Explore theories of social welfare, income distribution, and poverty alleviation, as well as government policies and programs aimed at addressing social inequalities.

Unit IV: Public Policy in the Social Sector (12 Hours)

Analyze the role of government policies and interventions in promoting social development and improving human well-being.

U**nit V: Evaluation and Impact Assessment (12 Hours)**

Assess methodologies for evaluating the impact of social policies and programs, including cost-benefit analysis, impact evaluation, and social accounting matrices.

Textbook Recommended:

1. Deaton, A. (2013). The Great Escape: Health, Wealth, and the Origins of Inequality. Princeton University Press.

Suggested Readings:

1. Mankiw, N. G. (2015). Principles of Economics. Cengage Learning.
2. Culyer, A. J., & Newhouse, J. P. (Eds.). (2000). Handbook of Health Economics (Vol. 1). Elsevier.

SDG Mapping:

SDG No.	SDG Title	Nature of Contribution
SDG 3	Good Health and Well-being	Focus on healthcare systems and policy effectiveness
SDG 4	Quality Education	Emphasis on education economics and human capital development
SDG 10	Reduced Inequalities	Addresses income distribution, poverty, and welfare policies

SDG 16	Peace, Justice and Strong Institutions	Highlights role of governance and public policy in social sector

Code	Course Title	Credit	L – T – P
EC32007	**History of Economic Thought**	**4**	**3-1-0**

Course Objectives: This course offers an exploration of the evolution of economic thought throughout history, focusing on key theories, thinkers, and debates that have shaped the discipline. Emphasis is placed on understanding the historical context and intellectual developments that have influenced economic theories and policies over time.

Course Learning Outcomes: On successful completion of this course the students will be able to:

CO1: To understand the evolution of economic thought from ancient to pre-classical periods and the contributions of early thinkers.

CO2: To Analyze the theories and contributions of classical economists such as Adam Smith, David Ricardo, and Thomas Malthus.

CO3: To Evaluate the development of neoclassical economics and the marginal revolution along with key contributors.

CO4: To Examine the Keynesian revolution and its impact on macroeconomic theory and policy formulation.

CO5: To Assess post-Keynesian and contemporary economic theories and their relevance to current economic issues.

CO–PO- PSO mapping Matrix:

Course Outcomes ↓	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4
CO1	3	3	2	2	1	1	1	1	1	1	2	2	2	1	1	1
CO2	3	3	3	2	2	1	1	1	2	1	2	2	3	2	2	2
CO3	3	3	3	2	2	1	1	1	2	2	2	2	3	3	2	2
CO4	3	3	3	3	2	2	1	2	2	2	3	2	3	2	2	2
CO5	3	3	3	3	3	3	2	2	2	3	3	3	3	3	3	3

Course Inputs:

Unit I: Pre-Classical Economic Thought (12 Hours)

Examine early economic ideas from ancient civilizations, including Mesopotamia, Greece, Rome, and China. Explore the contributions of early thinkers such as Aristotle, Confucius, and Ibn Khaldun.

Unit II: Classical Economics (12 Hours)

Study the emergence of classical economics in the 18th and 19th centuries, focusing on the works of Adam Smith, David Ricardo, and Thomas Malthus. Analyze the labor theory of value, the invisible hand, and theories of distribution.

U**nit III: Neoclassical Economics (12 Hours)**

Explore the neoclassical revolution in the late 19th and early 20th centuries, including the marginal revolution and the emergence of utility theory. Discuss the contributions of economists such as Alfred Marshall, Leon Walras, and Vilfredo Pareto.

U**nit IV: Keynesian Economics (12 Hours)**

Examine the Keynesian revolution and the development of macroeconomic theory in the 20th century. Analyze the works of John Maynard Keynes and the Keynesian approach to unemployment, aggregate demand, and fiscal policy.

Unit V: Post-Keynesian and Contemporary Economics (12 Hours)

Discuss developments in economic thought since the mid-20th century, including monetarism, new classical economics, and new Keynesianism. Explore contemporary debates in economics, such as globalization, inequality, and environmental sustainability.

Textbook Recommended:

1. Ekelund, R. B., & Hébert, R. F. (2014). A History of Economic Theory and Method (6th ed.). Waveland Press.

Suggested Readings:

1. Blaug, M. (1997). Economic Theory in Retrospect (5th ed.). Cambridge University Press.
2. Heilbroner, R. L. (2008). The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers (7th ed.). Simon & Schuster.

SDG Mapping;

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Enhances understanding of economic theories and intellectual history
SDG 8	Decent Work and Economic Growth	Provides insights into growth theories and labor markets

SDG 10	Reduced Inequalities	Examines inequality through different schools of thought
SDG 13	Climate Action	Links contemporary economic thought with sustainability concerns

Internship	IP37081	Internship	0	0	2	2

Course Learning Objectives:

To enable students to acquire practical knowledge and to act professionally in this area. This is meant to provide a scope to the students to apply theoretical knowledge in the real world, explore further in-depth knowledge in Tribal Resource Management.

Course Learning Outcomes:

CO1-The students will have working knowledge in the real world and operate.

CO2- Develop an understanding of the importance and scope of industry interface .

CO3- Understand the changing micro and macro environment of organizations and importance of industry research and forecasting.

CO4- Develop an understanding of the competitive strategies for industry.

CO5- Establish a link between academic programme and industry as a strategic tool for staying ahead in a competitive market.

Preamble:

The Summer Internship is a fully practical oriented course which has been designed to give students in depth knowledge about. Summer Internship is designed at the end of first year, where in student would have studied the courses in resource management and will have more scope to apply knowledge. In this subject, wherein he will be encouraged to explore concepts already dealt in the class and understand its application in the field. The student while carrying summer internship training Project is more focused and would be getting continuous guidance from the external as well as internal experts. The following note presents the broad guidelines of the Project.

PROCESS / GUIDELINES:

1) The student will be required to undergo a field placement for a total duration of 4-6 weeks in their chosen area of interest. Or institute will depute the students to various organizations looking at their area of interest.

2) In case the student makes the choice of the organization, it has to be made in consultation with the Institute. The Institute for this purpose should assign an internal faculty member who will act as the mentor throughout the Project. The assignment of mentor and choice of project should be made.

3) The study conducted by the student will be a full-time effort.

4) The proposal for the Summer Project or title of the project should be submitted to the Institute, which will ensure the registration of students for Project.

Students should prepare these proposals in consultation with the Internal and External Guide.

5) Students should send Joining Report on the first day of the joining which should be duly signed by the external guide.

6) Student should also send weekly reports every week keeping posted about the work –in – progress regarding project to the institute.

7) The format for the proposal or deciding about project title is as given below:

1. Title of the study
2. Need for the study (Stress on Need for study-current trends in the area)
3. A review of earlier research studies conducted
4. Objectives of the study
5. Methodology
6. Proposed outcomes and benefits of the study

8) The project should complete in time. Late submissions should not be entertained. A soft copy of all reports is to be submitted to Department on or before the submission date.

9) There shall be 2 copies of project reports along with soft copy to be submitted by each student to the School.

10) There will be a project viva-voice conducted by the University.

Deliverables:

The students are required to deliver the following Deliverables.

1) Joining Report and deciding project title/ proposal

2) Submission of project report (Soft copy + Hard copy- 2no.s /Project)

3) Presentation (for organization and the Institute)

4) Presentation for Viva-voce examination to be conducted by the University.

5) Student to present 1(One) copy to the organization and get the Certificate.

Format for Project Reports

The format for the Major Concurrent Project reports should be in the following manner.

1. Executive Summary
2. About the organization – Brief
3. Certificate of Completion
4. Introduction of the study
5. Objectives
6. Analysis and Findings
7. Discussion
8. Conclusion
9. References

In certain cases, students may change the format in consultation with his mentor and the External Guide. Enough care should be taken that the Project report focuses the study undertaken by the student and its findings. The report should contain minimum 25 pages with the following styles:

i) A-4 size paper (Executive Bond)

ii) MS Word style with Times New Roman Font

iii) Font size -12 for Text and 14 for headings

iv) Paper settings with 1-inch margins on all the four sides.

Semester-VI

Code	Course Title	Credit	L-T-P
EC30002	Environmental Economics	4	3-1-0

Course Learning Objectives:

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Get knowledge about the basic concepts of environmental economics.

CO2: Understand the causes and measures of theories of externalities.

CO3: Evaluate the implementation of environmental policies.

CO4: Identify the various environmental problems.

CO5: Analyze the objectives, policies and measurement of sustainable development.

CO-PO-PSO Mapping

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	2	3	1	1	1	2	1	2	2	3	2	1	1	2
CO2	3	3	2	3	3	2	2	2	2	1	2	2	3	3	2	1	2
CO3	2	3	3	3	3	2	2	2	2	2	3	3	2	3	2	2	3
CO4	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	2	2
CO5	2	3	3	2	3	2	3	2	2	2	3	3	2	2	3	2	3
Average	2.4	2.6	2.4	2.4	3	1.8	2	1.8	2	1.6	2.4	2.4	2.4	2.6	2	1.6	2.4

Mapping Scale

1 – Weakly Mapped (Low)**2** – Moderately Mapped (Medium)**3** – Strongly Mapped (High)

Course Inputs:

UNIT-I: Introduction (12 Lectures)

Meaning and basic concepts of Environmental economics. Relationship between environment and economic development.

UNIT-II: The Theory of Externalities (12 Lectures)

Pareto optimality and market failure in the presence of externalities; property rights and The Coase theorem.

UNIT-III: The Design and Implementation of Environmental Policy (12 Lectures)

Overview; Pigouvian taxes and effluent fees; tradable permits; choice between taxes and quotas under uncertainty; implementation of environmental policy.

UNIT-IV International Environmental Problems (12 Lectures)

Environmental problems, economics of climate change, trade and environment, linkage between environment and ecology.

UNIT-IV: Poverty and Inequality: Definitions, Measures and Mechanisms(12 Lectures)

Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes.

UNIT-V Sustainable Development (12 Lectures)

Concepts; Objectives, methods or conditions, policy and measurement.

Skill Development Activities/Practical Exercise

Textbooks Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press,

2nd edition, 2010.

2. https://youtu.be/tPm85HpraQg

Suggested Readings:

Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W.

Norton, 5th edition, 2005.

Notes: Latest Edition of the textbook should be used.

SDG Mapping with Course

Course Unit	Relevant SDG	Level (3/2/1)	Justification
Data Analysis & Visualization	SDG 4: Quality Education	3	Develops analytical and digital competencies.
Econometric Analysis	SDG 8: Decent Work and Economic Growth	3	Supports evidence-based economic analysis and policy evaluation.
Economic Modeling & Simulation	SDG 9: Industry, Innovation and Infrastructure	3	Encourages technological innovation and computational modeling.
Policy Analysis Applications	SDG 16: Peace, Justice and Strong Institutions	2	Promotes data-driven policy formulation and governance.
Research Projects Using Economic Data	SDG 17: Partnerships for the Goals	2	Encourages collaborative and interdisciplinary research.
Sustainability-related Economic Modeling	SDG 13: Climate Action	2	Can be applied to environmental and climate policy assessment.

Code	Course Title	Credit	L-T-P
EC30004	Development Economics	4	3-1-0

Course Learning Objectives:

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy

are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Get knowledge about the basic concepts of environmental economics.

CO2: Understand the causes and measures of theories of externalities.

CO3: Evaluate the implementation of environmental policies.

CO4: Identify the various environmental problems.

CO5: Analyze the objectives, policies and measurement of sustainable development.

CO-PO-PSO Mapping

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	2	2	3	1	1	1	2	1	2	2	3	2	1	1	2
CO2	3	3	2	3	3	2	2	2	2	1	2	2	3	3	2	1	2
CO3	2	3	3	3	3	2	2	2	2	2	3	3	2	3	2	2	3
CO4	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	2	2
CO5	2	3	3	2	3	2	3	2	2	2	3	3	2	2	3	2	3
Average	2.4	2.6	2.4	2.4	3	1.8	2	1.8	2	1.6	2.4	2.4	2.4	2.6	2	1.6	2.4

Mapping Scale

1 – Weakly Mapped (Low)**2** – Moderately Mapped (Medium)**3** – Strongly Mapped (High)

Course Inputs:

UNIT-I: Introduction (12 Lectures)

Meaning and basic concepts of Environmental economics. Relationship between environment and economic development.

UNIT-II: The Theory of Externalities (12 Lectures)

Pareto optimality and market failure in the presence of externalities; property rights and The Coase theorem.

UNIT-III: The Design and Implementation of Environmental Policy (12 Lectures)

Overview; Pigouvian taxes and effluent fees; tradable permits; choice between taxes and quotas under uncertainty; implementation of environmental policy.

UNIT-IV International Environmental Problems (12 Lectures)

Environmental problems, economics of climate change, trade and environment, linkage between environment and ecology.

UNIT-IV: Poverty and Inequality: Definitions, Measures and Mechanisms (12 Lectures)

Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes.

UNIT-V Sustainable Development (12 Lectures)

Concepts; Objectives, methods or conditions, policy and measurement.

Textbooks Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press,

2nd edition, 2010.

2. https://youtu.be/tPm85HpraQg

Suggested Readings:

Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W.

Norton, 5th edition, 2005.

Notes: Latest Edition of the textbook should be used.

SDG Mapping with this Course

SDG No.	Relevant SDG	Justification	Level
SDG 1	No Poverty	Understanding poverty, inequality, poverty traps, and inclusive development.	High
SDG 4	Quality Education	Promotes environmental awareness, analytical skills, and sustainable learning.	Moderate
SDG 8	Decent Work and Economic Growth	Examines sustainable economic development and policy interventions.	Moderate
SDG 10	Reduced Inequalities	Covers inequality measures, poverty mechanisms, and equitable growth.	High
SDG 12	Responsible Consumption and Production	Focus on environmental management, externalities, and sustainable resource use.	High
SDG 13	Climate Action	Discusses climate change economics, environmental policies, and ecological sustainability.	High
SDG 15	Life on Land	Emphasizes environmental conservation and natural resource management.	Moderate
SDG 16	Peace, Justice and Strong Institutions	Highlights environmental governance, policy implementation, and institutional mechanisms.	Moderate

Code	Course Title	Credit	L-T-P
EC30006	Agricultural Economics	4	3-1-0

Course Learning Objectives:

Agricultural economics deals with the methods of effective land usage, maximizing the crop yield, while maintaining the good soil eco-system. It is concerned with the application of economic theories to optimize the production and distribution of agricultural yield and how to enhance the agricultural productivity.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Learn the role of agriculture in economic development

CO2: Understand the agricultural production and productivity, factor use and resource substitution.

CO3: Evaluate the agricultural price policy and agricultural marketing in India.

CO4: Identify the role of planning and the need for state intervention, liberalization globalization.

CO5: Analyze new economic policy and role of WTO, MNCs, and FDI

CO-PO-PSO Mapping

COs/Pos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	3	1	1	1	2	1	2	2	3	2	2	1	2
CO2	2	3	2	3	3	2	2	2	2	1	2	2	3	3	2	1	2
CO3	2	3	3	3	3	2	2	2	2	2	3	2	2	3	2	2	3
CO4	3	3	2	3	3	2	2	2	2	2	2	3	2	3	2	2	3
CO5	3	3	3	3	3	2	3	2	2	3	3	3	2	3	3	3	3
Average	**2.4**	**3**	**2.4**	**2.8**	**3**	**1.8**	**2**	**1.8**	**2**	**1.8**	**2.4**	**2.4**	**2.4**	**2.8**	**2.2**	**1.8**	**2.6**

Mapping Scale

1 – Weakly Mapped (Low) 2 – Moderately Mapped (Medium) 3 – Strongly Mapped (High)

Course Inputs:

UNIT-I (12 Lectures) Nature and scope of agricultural economics; Role of agriculture in economic development, Economic growth &sectoral dynamics; Theories of agricultural development.

UNIT-II (12 Lectures)Agricultural production and productivity- measures of farm efficiency; Production function analysis- Factor use and resource substitution.

UNIT-III (12 Lectures)Agriculture marketing and price policy- Market structure and imperfections; Regulated markets; Cooperative marketing, Marketable surplus; Agricultural price policy- product price & factor price – issue of subsidies in agriculture, terms of trade between agricultural and industry – implications and Indian experiences.

UNIT-IV (12 Lectures)Agriculture & Rural Development-role of planning and need for state intervention. Liberalization in Indian Economy- Globalization

UNIT-V (12 Lectures)New Economic Policy and agriculture, Liberalization of trade and impacts- Role of World Trade Organization, MNCs and FDI.

Textbooks Recommended:

1.Rudra.A.(1982), Indian Agricultural Economics: Myths and Reality, Allied Publishers, New Delhi.

2.Ghatak.S. and K. Inger scent (1984), Agriculture and Economic Development, Select Books, New Delhi.

3.(1989) The Economic theory of Agricultural Institutions, O.U.P.

Suggested Readings:

DebrajRay(1998), Development Economics, O.U.P.

Notes: Latest Edition of the textbook should be used.

SDG Mapping with this Course

SDG No.	Sustainable Development Goal (SDG)	Course Relevance	Mapping Level
SDG 1	No Poverty	Focus on rural development, farmers' welfare, and agricultural income generation.	High
SDG 2	Zero Hunger	Direct emphasis on agricultural productivity, food security, and sustainable agriculture.	High
SDG 4	Quality Education	Promotes economic understanding and analytical skills in agriculture and development.	Moderate

SDG 8	Decent Work and Economic Growth	Examines agricultural growth, rural employment, and economic development.	High
SDG 10	Reduced Inequalities	Addresses rural inequality, agricultural reforms, and inclusive growth.	Moderate
SDG 12	Responsible Consumption and Production	Discusses efficient resource use, productivity, and sustainable agricultural practices.	High
SDG 13	Climate Action	Indirectly linked through sustainable farming practices and resource conservation.	Moderate
SDG 15	Life on Land	Focus on land use, soil ecosystem preservation, and sustainable agricultural development.	High
SDG 17	Partnerships for the Goals	Covers globalization, WTO, FDI, and international cooperation in agriculture.	Moderate

Code	Course Title	Credit	L-T-P
EC30008	Introductory Econometrics	4	3-1-0

Course Learning Objectives:

This course aims to introduce students to the fundamental principles and methods of econometrics, providing them with the necessary tools to analyze economic data and test economic theories empirically. Through a combination of theoretical lectures and hands-on practical sessions, students will learn how to formulate econometric models, estimate model parameters, and interpret regression results. The course will also cover important topics such as model specification, hypothesis testing, and the assumptions underlying regression analysis, enabling students to apply econometric techniques with rigor and confidence in empirical research.

Course Learning Outcomes:

CO1: Develop a solid understanding of the principles and techniques of econometric analysis, including the linear regression model and its extensions.

CO2: Gain proficiency in using econometric software packages to estimate regression models and perform diagnostic tests on model assumptions.

CO3: Acquire the ability to critically evaluate empirical studies in economics, assessing the validity of econometric methods and interpretations of results.

CO4: Apply econometric techniques to analyze real-world economic data and test hypotheses, drawing meaningful conclusions and insights from empirical analysis.

CO5: Demonstrate effective communication of econometric analysis, both in written reports and oral presentations, using appropriate statistical methods and interpretation of results.

CO-PO-PSO Mapping

CO/PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	1	3	1	2	3	2	–	1	1	–	1	1	3	2	2	1	2
CO2	1	2	1	2	3	2	–	3	1	–	2	–	2	3	2	1	3
CO3	1	2	2	3	2	3	1	1	1	–	1	1	2	3	3	2	2
CO4	1	3	2	3	3	3	1	2	2	1	2	2	3	3	3	2	3
CO5	1	1	3	2	1	2	2	1	1	2	2	1	1	2	1	3	2

Scale **3: High Correlation** **2** Moderate Correlation **1** Low Correlation

– No Significant Correlation

Course Inputs:

UNIT-I Nature and Scope of Econometrics (12 Lectures)

Definition and evolution of econometrics, Role and importance of econometrics, Interdisciplinary nature: integration of economics, mathematics, and statistics, Scope of Econometrics, Real-life examples in business and policy-making

UNIT-II Statistical Concepts (12 Lectures)

Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses

related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples.

UNIT-III Simple Linear Regression Model: Two Variable Case (12 Lectures)

Estimation of model by method of ordinary least squares; properties of estimators; goodness of fit; tests of hypotheses; scaling and units of measurement; confidence intervals; Gauss-Markov theorem; forecasting.

UNIT-IV Multiple Linear Regression Model (12 Lectures)

Estimation of parameters; properties of OLS estimators; goodness of fit - R2 and adjusted R2; partial regression coefficients; testing hypotheses – individual and joint; functional forms of regression models; qualitative (dummy) independent variables.

UNIT-V Violations of Classical Assumptions: Consequences, Detection and Remedies (12 Lectures)

Multicollinearity; heteroscedasticity; serial correlation.

Textbooks Recommended:

1. Jay L. Devore, *Probability and Statistics for Engineers,* Cengage Learning, 2010.

2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.

3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications,* Prentice Hall, 2011.

D. N. Gujarati and D.C. Porter, *Essentials of Econometrics,* McGraw Hill, 4th

edition, International Edition, 2009.

Suggested Readings:

1. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3rd

edition, Indian edition, 2007.

2. https://youtu.be/paScUqES3DQ

Notes: Latest Edition of the textbook should be used.

SDG Mapping with this Course

COs	Relevant SDGs	Nature of Contribution
CO1	**SDG 4 – Quality Education**	Develops quantitative and analytical learning skills in economics.
	SDG 8 – Decent Work and Economic Growth	Builds understanding of empirical economic analysis for policy and growth studies.
CO2	**SDG 4 – Quality Education**	Enhances technical and digital competency through econometric software applications.
	SDG 9 – Industry, Innovation and Infrastructure	Promotes use of data analytics and statistical tools for innovation and research.
CO3	**SDG 10 – Reduced Inequalities**	Enables analysis of inequality, poverty, and socio-economic disparities.
	SDG 16 – Peace, Justice and Strong Institutions	Encourages ethical and evidence-based interpretation of empirical studies.
CO4	**SDG 8 – Decent Work and Economic Growth**	Applies econometric methods to economic and labour market analysis.
	SDG 9 – Industry, Innovation and Infrastructure	Supports data-driven policy formulation and economic planning.
	SDG 13 – Climate Action	Facilitates empirical analysis of environmental and climate-related economic issues.
CO5	**SDG 4 – Quality Education**	Strengthens communication and presentation skills in research.
	SDG 10 – Reduced Inequalities	Promotes dissemination of inclusive and socially relevant economic findings.
	SDG 16 – Peace, Justice and Strong Institutions	Supports transparent, ethical, and evidence-based reporting practices.

Minor Course: (Singleand Double)

Code	Course Title	Credit	L-T-P
EC32002	Environment and Development	3	2-1-0

Course Learning Objectives

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Develop the knowledge about the basic features of Indian Economy.

CO2: Understand the trends in demographic issues.

CO3: Evaluate the trends and policies of poverty inequality and unemployment.

CO4: Identify the concept of national income and sectoral composition.

CO5: Analyze the growth and productivity of agriculture.

CO-PO Mapping

Mapping Scale: **1** – Weakly Mapped (Low) , **2** – Moderately Mapped (Medium) **3** – Strongly Mapped (High)

COs / POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	1	3	2	2	2	1	1	1	1	–	1	2	3	2	1	1	1
CO2	1	3	2	3	3	2	–	1	1	–	1	2	3	3	2	1	2
CO3	1	3	2	3	3	2	1	1	1	1	2	2	3	3	2	2	2
CO4	2	3	2	3	3	2	1	1	1	1	2	3	2	3	3	2	3
CO5	2	3	3	3	3	3	1	2	2	2	2	3	2	3	3	2	3

Average	**1.4**	**3**	**2.2**	**2.8**	**2.8**	**2**	**0.8**	**1.2**	**1.2**	**0.8**	**1.6**	**2.4**	**2.6**	**2.8**	**2.2**	**1.6**	**2.2**

Course Input unit wise

Module–I: Indian Economy at a Glance (12 Hours)

Basic features of the Indian economy; Sectoral composition: agriculture, industry, and services; Recent trends in growth and development

Module–II: Poverty, Inequality, and Unemployment (12 Hours)

Concept and measurement of poverty and inequality; Major causes and consequences; Types and trends of unemployment in India

Module–III: Revenue, Expenditure, and Debts (12 Hours)

Sources of government revenue; Major heads of public expenditure; Public debt and its impact on the economy

Module–IV: Trade and Global Linkages (12 Hours)

Trends in India's exports and imports; Balance of Payments (BoP); Foreign Direct Investment (FDI) and Viksit Bharat vision

Module–V: Local Government and Rural Development (12 Hours)

Structure and functions of local government (Panchayati Raj); Major rural development programmes; Role of local governance in economic development

Suggested Readings:

1. Datt, R. & Sundaram, K.P.M. - Indian Economy (S. Chand)

2. Mishra, S.K. & Puri, V.K. - Indian Economy (Himalaya Publishing)

3. Uma Kapila - Indian Economy (Academic Foundation)

SDG Mapping with Course

Unit/Course Component	SDG	Level (3/2/1)	Justification
Population and Human Development	SDG 3: Good Health and Well-Being	3	Focus on health, nutrition and human development indicators.

Education and Human Development	SDG 4: Quality Education	3	Examines educational development and human capital formation.
Poverty, Inequality and Employment	SDG 1: No Poverty	3	Directly addresses poverty reduction and welfare policies.
Poverty, Inequality and Employment	SDG 10: Reduced Inequalities	3	Studies income distribution and inequality issues.
Growth, Employment and Economic Performance	SDG 8: Decent Work and Economic Growth	3	Focus on economic growth, employment and productivity.
Agriculture, Land Reforms and Green Revolution	SDG 2: Zero Hunger	3	Agriculture leads to increase food production.

Code	Course Title	Credit	L-T-P
EC32004	**ECONOMIC DEVELOPMENT AND POLICY IN INDIA (Double Major)**	4	3-1-0

Course Objectives:

This course examines the economic development and policy landscape of India, focusing on key policies, challenges, and strategies for economic growth. It explores the evolution of India's development trajectory, the role of government policies, and the impact of globalization and liberalization. Emphasis is placed on understanding the complexities of development issues and formulating evidence-based policy recommendations.

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Understand the evolution of India's economic development and policy framework.

CO2: Analyze the impact of government policies on economic growth, poverty, and inequality in India.

CO3: Evaluate the effectiveness of development strategies and policies in addressing socio-economic challenges.

CO4: Apply economic concepts and analytical tools to analyze real-world development issues in India.

CO5: Formulate evidence-based policy recommendations to promote inclusive and sustainable development in India.

CO–PO–PSO Mapping Table

3 = High, 2 = Medium, 1 = Low, "–" = No direct mapping

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	1	1	1	–	1	–	1	1	–	2	3	2	1	2
CO2	3	3	3	2	2	1	2	1	1	2	1	2	3	3	3	2
CO3	3	3	3	3	2	2	2	1	1	2	1	2	3	3	3	3
CO4	3	3	3	3	3	2	2	1	2	2	2	3	3	3	3	3
CO5	3	3	3	3	3	2	3	2	2	2	2	3	3	3	3	3

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Course Inputs:

Unit I: Economic Development in India (12 Lectures)

Examine the historical context and stages of India's economic development, including pre-independence and post-independence periods.

Unit II: Economic Reforms and Liberalization (12 Lectures)

Study the economic reforms and liberalization policies initiated in 1991 and their impact on India's economy, industry, and trade.

Unit III: Poverty, Inequality, and Social Development (12 Lectures)

Explore issues of poverty, inequality, and social development in India, including access to education, healthcare, and social protection.

Unit IV: Sectoral Policies and Industrial Development (12 Lectures)

Examine sectoral policies, including industrial, agricultural, and service sector policies, and their role in promoting economic growth and employment generation.

Unit V: Sustainable Development and Environmental Policy (12 Lectures)

Assess India's approach to sustainable development and environmental policy, including challenges related to climate change, pollution, and natural resource management.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate

b) Quiz

c) PPT Presentation

d) Assignment writing

e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. Ahluwalia, M. S. (2002). Economic Development & Policy in India. Oxford University Press.

- **Reference Materials & Digital Resources:**

2. Basu, K. (2007). The Oxford Companion to Economics in India. Oxford University Press.

3. Dreze, J., & Sen, A. (2013). An Uncertain Glory: India and Its Contradictions. Penguin Books.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 1	No Poverty	Examines poverty reduction policies and inclusive development strategies.
SDG 4	Quality Education	Enhances understanding of development policy and socio-economic analysis.
SDG 5	Gender Equality	Promotes gender-inclusive development and policy evaluation.
SDG 8	Decent Work and Economic Growth	Supports growth-oriented policy analysis and employment generation.
SDG 10	Reduced Inequalities	Addresses inequality, redistribution, and inclusive development.
SDG 13	Climate Action	Integrates sustainability and climate-sensitive development policy.
SDG 16	Peace, Justice and Strong Institutions	Strengthens governance, accountability, and institutional development.
SDG 17	Partnerships for the Goals	Encourages collaborative and evidence-based development policy approaches.

Code	Course Title	Credit	L-T-P
EC32006	**MONEY AND FINANCIAL MARKET (Double Major)**	4	3-1-0

Course Objectives:

This course provides an overview of money and financial markets, examining their structure, functions, and role in the economy. It explores the concepts of money supply, monetary policy, and the functioning of financial institutions. Emphasis is placed on understanding the interactions between monetary policy, financial markets, and economic activity.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Understand the functions and characteristics of money, as well as the determinants of money supply.

CO2: Analyze the role of central banks in controlling the money supply and implementing monetary policy.

CO3: Evaluate the structure and operations of financial markets, including money markets, bond markets, and stock markets.

CO4: Assess the impact of monetary policy on interest rates, inflation, and economic activity.

CO5: Apply financial market concepts to analyze real-world financial events and developments.

CO–PO–PSO Mapping Table:

3 = High, 2 = Medium, 1 = Low, "–" = No direct mapping

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	1	1	1	–	–	–	1	1	–	2	3	2	1	1
CO2	3	3	3	2	2	1	–	1	1	2	1	2	3	3	3	2
CO3	3	3	3	2	3	1	–	1	1	2	1	2	3	3	3	2
CO4	3	3	3	3	3	2	–	2	1	2	1	2	3	3	3	3
CO5	3	3	3	2	3	2	–	2	2	2	1	3	3	3	3	3

Course Inputs:

Unit I: Introduction to Money and Financial Markets (12 Lectures)

Examine the functions and characteristics of money, types of financial assets, and the role of financial intermediaries. Discuss the importance of financial markets in channeling funds between savers and borrowers.

Unit II: Money Supply and Monetary Policy (12 Lectures)

Study the determinants of money supply, the money multiplier process, and the role of central banks in controlling the money supply. Analyze the objectives, tools, and transmission mechanisms of monetary policy.

Unit III: Financial Markets and Instruments (12 Lectures)

Explore the structure and operations of money markets, bond markets, and equity markets. Discuss the characteristics of different financial instruments, including treasury bills, bonds, stocks, and derivatives.

Unit IV: Interest Rates and Risk Management (12 Lectures)

Examine the determination of interest rates in financial markets and the relationship between interest rates and bond prices. Discuss risk management techniques, including diversification, hedging, and derivatives.

Unit V: Monetary Policy and Economic Activity (12 Lectures)

Assess the impact of monetary policy on interest rates, inflation, exchange rates, and economic growth. Analyze the challenges and limitations of monetary policy in stabilizing the economy.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate

b) Quiz

c) PPT Presentation

d) Assignment writing

e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. Mishkin, F. S., & Eakins, S. G. (2015). Financial Markets and Institutions (8th ed.). Pearson.

- **Reference Materials & Digital Resources:**

1. Frederic S. Mishkin (2009). The Economics of Money, Banking, and Financial Markets (10th ed.). Addison Wesley.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 4	Quality Education	Enhances financial literacy, monetary understanding, and analytical competence.
SDG 5	Gender Equality	Promotes inclusive financial participation and equitable financial access.
SDG 8	Decent Work and Economic Growth	Supports efficient financial intermediation and economic stability.
SDG 9	Industry, Innovation and Infrastructure	Encourages financial innovation and institutional market development.
SDG 10	Reduced Inequalities	Promotes financial inclusion and equitable access to financial systems.
SDG 16	Peace, Justice and Strong Institutions	Strengthens financial governance, regulation, and institutional accountability.
SDG 17	Partnerships for the Goals	Encourages coordination among financial institutions and policy stakeholders.

Code	Course Title	Credit	L-T-P
EC32008	**PUBLIC FINANCE (Double Major)**	4	3-1-0

Course Objectives: This course explores the principles and practices of public finance, focusing on government revenue, expenditure, and fiscal policy. It examines the role of government in the economy, the allocation of resources through taxation and spending, and the impact of fiscal policy on economic outcomes. Emphasis is placed on understanding the rationale for government intervention, the design of tax and expenditure policies, and the evaluation of fiscal sustainability.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Understand the role and functions of government in the economy, including its revenue-raising and expenditure responsibilities.

CO2: Analyze the principles and theories of taxation, including the incidence and efficiency effects of different tax policies.

CO3: Evaluate the impact of government spending programs on resource allocation, income distribution, and economic growth.

CO4: Assess the effectiveness and efficiency of fiscal policy measures in achieving macroeconomic objectives such as stabilization and growth.

CO5: Apply economic analysis to evaluate fiscal sustainability, intergovernmental fiscal relations, and public debt manageme

CO–PO–PSO Mapping Table:

3 = High, 2 = Medium, 1 = Low, "–" = No direct mapping

CO \ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	2	1	1	1	3	1	2	1	2	2	3	2	2	1
CO2	2	3	3	1	1	1	3	1	1	1	3	2	3	3	2	2
CO3	2	3	3	1	1	1	3	1	1	1	3	2	3	3	3	2
CO4	2	3	2	2	1	2	3	2	2	2	3	3	2	3	2	2
CO5	2	3	3	2	2	2	3	1	3	2	3	3	3	3	3	3

Course Inputs:

Unit I: Introduction to Public Finance (12 Lectures)

Examine the role and functions of government in the economy, the principles of taxation, and the theories of public expenditure. Discuss the rationale for government intervention in markets and the concept of market failure.

Unit II: Taxation and Revenue Policies (12 Lectures)

Study the principles of taxation, including tax incidence, equity, efficiency, and administrative considerations. Analyze different types of taxes, such as income taxes, consumption taxes, and property taxes, and their impact on behavior and economic outcomes.

Unit III: Government Expenditure and Budgeting (12 Lectures)

Explore the determinants of government spending, including public goods, merit goods, and transfer payments. Discuss the budgeting process, public investment decisions, and the evaluation of government programs.

Unit IV: Fiscal Policy and Macroeconomic Stabilization (12 Lectures)

Assess the role of fiscal policy in stabilizing the economy, including discretionary and automatic stabilizers. Analyze the effectiveness and limitations of fiscal policy measures in addressing inflation, unemployment, and business cycles.

Unit V: Public Debt and Fiscal Sustainability (12 Lectures)

Examine the implications of public debt, including its financing, management, and sustainability. Discuss the intergenerational equity issues associated with public debt accumulation and the challenges of fiscal consolidation.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate

b) Quiz

c) PPT Presentation

d) Assignment writing

e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. Rosen, H. S., & Gayer, T. (2017). Public Finance (10th ed.). McGraw-Hill Education.

- **Reference Materials & Digital Resources:**

1. Musgrave, R. A., & Musgrave, P. B. (1989). Public Finance in Theory and Practice (5th ed.). McGraw-Hill Education.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 1	No Poverty	Supports redistributive policies and poverty-focused public expenditure.
SDG 4	Quality Education	Enhances understanding of fiscal systems, taxation, and public policy.

SDG 5	Gender Equality	Promotes gender-responsive budgeting and equitable fiscal policy.
SDG 8	Decent Work and Economic Growth	Supports fiscal policy for employment, investment, and growth.
SDG 10	Reduced Inequalities	Addresses redistribution, progressive taxation, and inclusive fiscal systems.
SDG 16	Peace, Justice and Strong Institutions	Strengthens fiscal governance, accountability, and institutional effectiveness.
SDG 17	Partnerships for the Goals	Encourages intergovernmental coordination and cooperative fiscal governance.

Semester VII

Code	Course Title	Credit	L-T-P
SR40001	Social Research Methods	4	3-1-0

Course Learning Objectives:

To infuse the idea of understanding the environment through social research employing the moralities for driving into the findings accurately.

Pedagogy: Lectures, Process of writing an article and project proposal and Projects

Course Learning Outcomes: On successful completion of this course the student shall be able to:

CO1: Understand the role and responsibilities of a Researcher.

CO2: Formulate the research problem and research design.

CO3: Design research plan and collect relevant data applying sampling techniques.

CO4: Develop data collection process, manage fieldwork and to report research findings.

CO5: Communicate the results to society at large and follow up and report the findings of the research with suggestions and apply the research ethics in the research process**.**

CO-PO-PSO Mapping

Course Outcomes (COs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	2	1	2	2	3	1	2	1	2	2	1	2	1	3

Course Outcomes (COs)	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO2: ‘	3	3	2	3	2	1	1	2	1	2	1	2	3	2	2	1	2
CO3:	2	3	3	3	3	1	1	2	2	2	1	2	3	3	2	2	2
CO4:	2	2	3	3	2	2	2	2	3	3	1	2	2	3	3	2	2
CO5:	2	2	2	2	1	3	3	3	3	3	2	3	2	2	3	2	3

Legend

- **3 = Strong Correlation**
- **2 = Moderate Correlation**
- **1 = Low Correlation**

Course Inputs:

UNIT I: Social Research: (12 Lectures)

Research Objective, Types of Research: Basic, Applied, Historical and Empirical, case study research. Steps in Social Research: Steps of research, Formulation of research problem, Literature review, Writing a research proposal, Synopsis writing.

UNIT II: Research Design: (12 Lectures)

Research design: Meaning, Definition and Features, Types of research design: Exploratory, Descriptive/Diagnostic, Experimental Sampling Design: Sampling: Concept, Types: Random, stratified, proportionate, quota, cluster or multistage, purposive and systematic sampling.

UNIT III: Methods of Data Collection: (12 Lectures)

Methods of primary data collection: Observation, Schedule, Questionnaire, Interview, Case study, Focused Group discussion (FGD), Participatory rural appraisal (PRA), Guidelines and methods for collection of secondary data.

UNIT IV: Statistical Analysis: (12 Lectures)

Frequency distribution and graphical presentation; Descriptive Statistics: Mean, Median, Mode, Standard Deviation; Co-relation and regression. Hypothesis: Research hypothesis, Testing of Hypothesis, t, F, Z, ANOVA and Chi-Square tests.

UNIT V: Report Writing: (12 Lectures)

Format/structure of research report, Techniques of report writing, Bibliography, Referencing. Research and Publication Ethics

Text Book Recommended:

Kothari, C. R.(2020) Research Methodology, Methods and Techniques –Wiley Eastern Limited – New Delhi.

Suggested Readings:

Ahuja, Ram (2018), Research Methods. Jaipur: Rawat Publication.

Dash, P.R. (2017). Research Methodology using SPSS, Vrinda Publications, New Delhi.

Grbich, C. (2014). New Approaches in Social Research. London, Sage Publications.

Gupta, C.B and Gupta, V.(2019) An Introduction to Statistical Methods, New Delhi: Vikas Publishing House PVT Ltd

Seale, C. (2018). Social Research Methods: A Reader. London, Routledge.

Swain A.K.P.C (2018), " A Text book of Research Methodology", Kalyani Publications

William G. Zigmund (2018), Business Research Methods, S. Chand and Company Ltd.

https://youtu.be/1i5CQuNUS3k

Note: Latest edition of the text books should be used.

SDG Mapping of the Course

SDG Goal	**Relevance to the Course**
SDG 4: Quality Education	Enhances research skills, analytical ability and academic writing competence.
SDG 5: Gender Equality	Encourages gender-sensitive and inclusive social research practices.
SDG 8: Decent Work and Economic Growth	Research skills improve employability, policy analysis and socio-economic understanding.
SDG 10: Reduced Inequalities	Research methods help identify social exclusion, inequality and marginalized communities.
SDG 11: Sustainable Cities and Communities	Social research supports community studies and sustainable development planning.
SDG 16: Peace, Justice and Strong Institutions	Promotes ethical research, transparency, evidence-based policy and institutional accountability.
SDG 17: Partnerships for the Goals	Fieldwork, participatory approaches and collaborative research encourage partnerships and stakeholder engagement.

Code	Course Title	Credit	L-T-P
EC40003	Financial Institution and Market	4	3-1-0

Course Learning

Objectives:

Financial Institution and Market introduce students to the structure, functions, and operations of financial institutions and markets in modern economies. The course aims to provide students with a comprehensive understanding of the role of financial intermediaries, financial instruments, and regulatory frameworks in the functioning of financial systems. Through theoretical analysis and case studies, students will explore topics such as banking, insurance, securities markets, and central banking. By the end of the course, students will be equipped with the knowledge to analyze the workings of financial institutions and markets and their impact on the economy.

Pedagogy:

Lectures, Case Studies, Group Discussions, Assignments, Presentations

Course Learning Outcomes:

CO1: Understand the structure and functions of financial institutions and markets in modern economies.

CO2: Analyze the role of financial intermediaries in facilitating capital allocation and risk management.

CO3: Evaluate the functioning of securities markets and their impact on capital formation and investment.

CO4: Assess the objectives and tools of monetary policy and the role of central banks in achieving macroeconomic stability.

CO5: Recognize the importance of financial regulation and risk management in maintaining financial system stability.

CO–PO Mapping Table

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1	1
CO2	1	3	2	3	3	2	1	2	2	1	2	1	3	3	2	1	1
CO3	2	3	2	2	3	2	1	1	2	2	2	2	3	3	2	2	2
CO4	2	2	3	3	3	2	2	2	2	2	3	1	2	3	3	3	2
CO5	3	3	2	3	3	2	1	2	2	2	3	2	3	3	3	2	2
Average	2	2.8	2.2	2.6	2.8	1.8	1.2	1.6	2	1.6	2.2	1.4	2.8	2.8	2.2	1.8	1.6

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

Unit I: Introduction to Financial Institutions and Market (12 Lectures)

Overview of financial systems and their components; Functions of financial institutions: Intermediation, Risk management, Payment systems; - Classification of financial markets: Money markets, Capital markets, Derivatives markets

Unit II: Banking and Financial Intermediaries (12 Lectures)

Role of banks in the economy: Depository and lending functions; Types of banks: Commercial banks, Investment banks, Central banks; non-bank financial intermediaries: Insurance companies, Mutual funds, Pension funds

Unit III: Securities Markets(12 Lectures)

Types of securities: Stocks, Bonds, Derivatives; - Primary and secondary markets: Issuance and trading of securities; Stock exchanges and trading mechanisms; Regulation and oversight of securities markets

Unit IV: Central Banking and Monetary Policy (12 Lectures)

Functions and objectives of central banks; monetary policy tools and objectives: Interest rates, Open market operations, Reserve requirements; Role of central banks in maintaining price stability and financial stability; Central bank independence and accountability

Unit V: Financial Regulation and Risk Management (12 Lectures)

Regulatory framework for financial institutions and markets; Basel Accords and international regulatory standards; Risk management practices: Credit risk, Market risk, Liquidity risk; Financial crises and their impact on financial institutions and markets

Textbooks Recommended:

Mishkin, F. S., & Eakins, S. G. (2015). Financial Markets and Institutions. Pearson.

Fabozzi, F. J., Modigliani, F., & Jones, F. J. (2010). Foundations of Financial Markets and Institutions. Pearson.

Suggested Readings:

Saunders, A., & Cornett, M. M. (2017). Financial Institutions Management: A Risk Management Approach. McGraw-Hill Education.

Mishkin, F. S. (2018). The Economics of Money, Banking, and Financial Markets. Pearson.

https://youtu.be/Q8haOsqVWy4

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Financial literacy and analytical skill development
SDG 8	Decent Work and Economic Growth	Understanding financial markets for employment and growth
SDG 9	Industry, Innovation and Infrastructure	Role of financial systems in economic infrastructure
SDG 12	Responsible Consumption and Production	Promoting responsible investment and financial decisions

Code	Course Title	Credit	L-T-P
EC40005	WELFARE ECONOMICS	4	3-1-0

Course Learning Objectives:

The importance of welfare economics establishes norms of behavior which satisfy the requirements of social rationality of economic activity. The term social rationality of economic activity is to be interpreted as that activity which ensures optimum allocation of resources which leads to maximization of social welfare.

Pedagogy: Classroom lectures, Problem-solving, Tutorials, Assignment, Seminars and Group discussions.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Acquire a deeper understanding of individual welfare and social welfare.

CO2: Possess knowledge of marginal condition of pareto optimizing.

CO3: Understand about new welfare economics and different theories.

CO4: Acquire knowledge about externalities and market failure.

CO5: Develop an idea about Production Possibility curve from Production possibility curve to Grand Utility Possibility Frontier to the point of Constrained Bliss.

CO–PO Mapping Table

COs/POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1
CO3	3	3	2	3	3	2	1	1	2	2	2	3	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3
Average	2.5	2.75	2.25	2.75	2.75	1.75	1.25	1	2	1.5	2	2.5	2.75	2.75	2	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

UNIT-I Welfare Economics: An Introduction (12 Lectures)

Welfare Economics: Individual welfare and social welfare; three concepts of social welfare; Role of value judgment in welfare economics; Partial equilibrium and general equilibrium analysis; Transformation curve and general equilibrium of production.; General equilibrium of production and exchange.

UNIT-II Concept and conditions of Pareto optimality(12 Lectures)

Pareto criterion of social welfare: Equilibrium approach; Marginal condition of Pareto optimization; optimum distribution of products among the consumers; efficiency of exchange; the optimum allocation of factors.

UNIT-III New Welfare Economics: Compensation Principles (12 Lectures)

Introduction; Kaldor-Hicks Welfare Criterion: Compensation Principle. Scitovsky Paradox; Scitovskys Doub

Criterion of Welfare; A Critique of the Compensation Principle.

UNIT-IV: Market Failures, Externalities and Public Goods (12 Lectures)

Monopoly as an obstacle in the attainment of Pareto Optimality; Externalities and Market failure- Positive externaliti

in production; Externalities in Consumption; How externalities causes Market Failure? Public Goods and market failu

Free riders' problem

UNIT-V Grand Utility Possibility Frontier and Welfare Maximization(12 Lectures)

Introduction; From Factor Endowments and Production Functions to the Production Possibility curve; From Production possibility curve to Grand Utility Possibility Frontier to the point of Constrained Bliss.

Textbooks Recommended:

Roger A.mc Cain (2000) Welfare Economics An Interpretive History.Routledge Taylor and Francis. London

K E Boulding (1952) Welfare Economics in B E Haley

Nicholas Kaldor (1959) Welfare Propositions in welfare Economics. Columbia University Press,New York.

I M D Little (1957) A critique of Welfare Economics , Oxford University press ,2nd edition 1957.

Suggested Readings:

W. J. Baumol (1978), Economic Theory and Operations Analysis, 4th edition ,Prentic Hill.

M W Reder (1967) Studies in the theory of Welfare Economics Columbia University press , New York.

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Enhances understanding of social welfare concepts
SDG 8	Decent Work and Economic Growth	Promotes inclusive economic growth
SDG 10	Reduced Inequalities	Focus on income distribution and equity
SDG 12	Responsible Consumption and Production	Efficient allocation of resources

Code	Course Title	Credit	L-T-P
EC40005	INDUSTRIAL ECONOMICS	4	3-1-0

Course Learning Objectives:

Industrial Economics explores the behavior of firms and industries within the broader context of market structures, competition, and government policies. The course aims to provide students with a theoretical and empirical understanding of industrial organization and its implications for market outcomes, firm behavior, and economic welfare. Through the study of market structures, pricing strategies, and strategic interactions, students will gain insights into the functioning of markets and the role of competition in promoting efficiency. By the end of the course, students will be equipped with analytical tools to analyze real-world industrial issues and formulate policy recommendations**.**

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Understand the key concepts and theories of industrial economics, including market structures, pricing strategies, and strategic interactions.

CO2: Analyze the behavior of firms and industries in different market environments, assessing the implications for market outcomes and economic welfare.

CO3: Apply game theory and strategic analysis to analyze competitive strategies and firm behavior in oligopolistic markets.

CO4: Evaluate the impact of government policies and regulations on industrial performance and market dynamics.

CO5: Formulate evidence-based policy recommendations to promote competition and enhance economic efficiency in industrial markets.

CO–PO Mapping Table

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1
CO3	2	3	2	2	3	2	1	1	2	2	2	2	3	3	2	2
CO4	2	2	3	3	3	2	2	2	2	2	3	2	2	3	3	3
Average	2	2.75	2.25	2.5	2.75	1.75	1.25	1.25	2	1.5	2	1.5	2.75	2.75	2	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

Unit I:Introduction to Industrial Economics (12 Lectures)

Overview of industrial organization and its relevance to economic analysis; Market structures: Perfect competition, Monopoly, Oligopoly, Monopolistic competition; Analytical tools: Concentration ratios, Herfindahl-Hirschman Index (HHI), Game theory

Unit II: Market Power and Pricing Strategies (12 Lectures)

Market power and its determinants; Pricing strategies: Price discrimination, Predatory pricing, Bundling; Non-price competition: Product differentiation, Advertising, Branding

Unit III: Strategic Interactions and Game Theory (12 Lectures)
Basics of game theory: Prisoner's dilemma, Nash equilibrium; Strategic interactions in oligopolistic markets; Collusion and cartel behavior; antitrust policy and competition regulation

Unit IV: Vertical Relationships and Market Integration (12 Lectures)
Vertical integration and its implications for competition; Vertical restraints: Price fixing, Exclusive dealing, Tying arrangements; Merger and acquisition strategies

Unit V: Government Policies and Industrial Performance (12 Lectures)
Industrial policy: Objectives, Instruments, and Evaluation; Regulation and deregulation: Impact on market structure and firm behavior; Competition policy and antitrust enforcement; Intellectual property rights and innovation incentives

Textbooks Recommended:

Tirole, J. (1988). The Theory of Industrial Organization. MIT Press.

Carlton, D. W., & Perloff, J. M. (2015). Modern Industrial Organization. Pearson.

Suggested Readings:

Belleflamme, P., & Peitz, M. (2015). Industrial Organization: Markets and Strategies. Cambridge University Press.

Shy, O. (2018). Industrial Organization: Theory and Applications. MIT Press.

SDG Mapping for this Course

SDG No.	**SDG Title**	**Nature of Contribution**
SDG 4	Quality Education	Enhances industrial and analytical knowledge
SDG 8	Decent Work and Economic Growth	Industrial development and employment generation
SDG 9	Industry, Innovation and Infrastructure	Understanding industrial growth and innovation

SDG 12	Responsible Consumption and Production	Promotes sustainable industrial practices

Minor Course: Single and Double

Code	Course Title	Credit	L-T-P
EC42001	**Economics of Gender (Minor)**	4	3-0-2

Course Objectives:

Gender biases in societal practices and development policies have resulted in persistent gender inequalities. It is increasingly being realized that mitigating such inequalities and enhancing women's capabilities and entitlements are crucial to the overall development of the country. This paper would provide students an understanding of the nature of the economic role of women and their contribution to the national economy.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Understand the importance and concepts of women studies.

CO2: Develop an idea on demography of female population.

CO3: Explore appropriate knowledge on concept and analysis of women's work.

CO4: Critically examine the factors affecting decision making by women.

CO5: Evaluate the effectiveness of government policies and planning on gender and its governance.

CO–PO–PSO Mapping:

Mapping Scale

- **3** – High Correlation
- **2** – Moderate Correlation
- **1** – Low Correlation
- Blank – No Correlation

COs \ POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO2	PSO3	PSO4
CO1	3	2	1	1	1	3	2	3	2	2	1	2	3	2	1	2
CO2	3	3	2	2	1	3	2	3	2	2	2	2	3	3	2	2
CO3	3	3	2	2	1	3	2	3	2	2	2	3	3	3	2	2
CO4	3	3	3	2	2	3	3	3	3	2	2	3	3	3	3	3
CO5	3	3	3	3	2	3	3	3	3	3	2	3	3	3	3	3

Course Inputs:

UNIT-I Importance and concepts of women studies (12 Hours)

Women in patriarchal and matriarchal societies; Economic basis and functioning of patriarchy in developed and LDCs- particularly India; Gender bias in the theories of value, distribution, and population.

UNIT-II Demographic Aspects (12 Hours)

Demography of female population: Age structure, mortality rates, and sex ratio- Causes of declining sex ratios and fertility rates in LDCs and particularly India - Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and work participation rate.

UNIT-III Conceptualization of Women's Work (12 Hours)

Concept and analysis of women's work: Valuation of productive and unproductive work; visible and invisible work; paid and unpaid work; economically productive and socially productive work.

UNIT- IV Women in Decision Making (12 Hours)

Factors affecting decision making by women; property rights, access to and control over economic resources, assets; power of decision making at household, class, community level; Economic status of women(in the urban & rural context) and its effect on work-participation rate, income level, health, and education in developing countries and India.

UNIT-V Gender Planning, Development Policies and Governance (12 Hours)

Gender and development indices; mainstreaming gender into development policies; Gender planning techniques; Gender sensitive governance; Paradigm shifts from women's well being to women's empowerment; Concept of women empowerment, Democratic decentralization (Panchayats) and women's empowerment in India.

Skill Development Activities/Practical Exercise

a) Group discussion/Debate
b) Quiz
c) PPT Presentation
d) Assignment writing
e) Seminars

Recommended Learning Resources

1. **Textbooks:**

1. Agarwal, B. (1994). A Field of One's Own: Gender and Land Rights in South Asia, Cambridge Univ. Press, Cambridge.

- **Reference Materials & Digital Resources:**

1. Amsden, A.H. (ed.). (1980). The Economics of Women and Work, Penguin, Harmondswosrth

2. Baud, I.S.A. (1992). Forms and Production and Women's Labour: Gender Aspects of Industrialization in India and Mexico, Sage Publications, New Delhi.

3. Boserup, E. (1970), Women's Role in Economic Development, George Allen and Unwin, London

4. Desai, N. and M. K. Raj (Eds.) (1979), Women and Society in India, Research Centre for Women Studies, SNDT University, Bombay.

5. Government of India (1974), Towards Equality-Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare,New Delhi

6. Jhabwala, R. and R.K. Subramanya (eds.). (2000). The Unorganized Sector: Work Security and Scial Protection, Sage Publications, New Delhi.

7. Krishnaraj, N., R. M. Sudarshan and A. Shariff (1999), Gender, Population and Development, Oxford University Press, New Delhi.

8. Narasimhan, S. (1999). Empowering Women: An Alternative Strategy from Rural India, Sage Publications, New Delhi.

9. Patel, Vibhuti (2002) Women's Challenges of the New Millennium, Gyan Publications, Delhi

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course

SDG 1	No Poverty	Highlights women's economic participation and poverty reduction through empowerment.
SDG 4	Quality Education	Enhances gender literacy, awareness, and socio-economic understanding.
SDG 5	Gender Equality	Promotes women's empowerment, gender justice, and equal opportunities.
SDG 8	Decent Work and Economic Growth	Examines women's work, labour participation, and inclusive economic growth.
SDG 10	Reduced Inequalities	Addresses structural inequalities affecting women and marginalized groups.
SDG 16	Peace, Justice and Strong Institutions	Encourages gender-sensitive governance, justice, and inclusive institutions.
SDG 17	Partnerships for the Goals	Supports collaborative policy and institutional approaches to gender development.

Code	Course Title	Credit	L-T-P
EC42003	**New Institutional Economics (Double Minor)**	4	3-0-2

Course Objectives:

This course aims to find the field of New Institutional Economics (NIE), which explores the role of institutions in shaping economic behavior and outcomes. It examines how formal and informal institutions, including laws, norms, and organizations, influence economic activities, transactions, and governance structures. Emphasis is placed on understanding the analytical frameworks and methodologies of NIE and their applications in various economic contexts.

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Understand the theoretical foundations and key concepts of New Institutional Economics.

CO2: Analyze the role of institutions in shaping economic behavior, transactions, and outcomes.

CO3: Evaluate the impact of institutional change on economic development, efficiency, and governance.

CO4: Apply NIE frameworks and methodologies to analyze real-world economic issues and policy challenges.

CO5: Formulate evidence-based recommendations for institutional reforms to promote economic growth and development.

CO–PO–PSO Mapping Table:

Mapping Scale

- **3** – High Correlation
- **2** – Moderate Correlation
- **1** – Low Correlation
- Blank – No Correlation

COs \ POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	1	1	1	2	1	2	1	2	1	2	3	2	1	2
CO2	3	3	2	2	1	2	1	2	2	2	2	2	3	3	2	2
CO3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	2
CO4	3	3	3	3	3	2	2	3	2	3	2	3	3	3	3	3
CO5	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3

Course Inputs:

Unit I: Introduction to New Institutional Economics (12 hours)

Examine the origins, scope, and methodologies of New Institutional Economics. Discuss key concepts such as transaction costs, property rights, and governance structures.

Unit II: Institutions and Economic Behavior (12 hours)

Study the role of institutions in shaping economic behavior, including contracting, property rights enforcement, and market transactions.

Unit III: Institutional Change and Economic Development (12 hours)

Explore theories of institutional change and their implications for economic development, innovation, and entrepreneurship.

Unit IV: Governance Structures and Organizational Forms (12 hours)

Analyze different governance structures and organizational forms, including markets, hierarchies, and hybrid arrangements.

Unit V: Policy Implications and Institutional Reforms (12 hours)

Assess the policy implications of New Institutional Economics for economic regulation, governance reform, and institutional development.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate

b) Quiz

c) PPT Presentation

d) Assignment writing

e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. North, D. C., Wallis, J. J., & Weingast, B. R. (2009). Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History. Cambridge University Press.

- **Reference Materials & Digital Resources:**

1. Williamson, O. E. (2000). The New Institutional Economics: Taking Stock, Looking Ahead. Journal of Economic Literature, 38(3), 595-613.

2. Furubotn, E. G., & Richter, R. (2005). Institutions and Economic Theory: The Contribution of the New Institutional Economics. University of Michigan Press.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 1	No Poverty	Examines institutional frameworks for poverty reduction and inclusive development.
SDG 4	Quality Education	Enhances institutional and policy analysis skills.
SDG 8	Decent Work and Economic Growth	Supports efficient institutions for economic growth and employment generation.
SDG 9	Industry, Innovation and Infrastructure	Highlights the role of institutions in innovation and industrial development.
SDG 10	Reduced Inequalities	Promotes inclusive institutions and equitable access to resources.
SDG 12	Responsible Consumption and Production	Encourages institutions for sustainable resource management.
SDG 16	Peace, Justice and Strong Institutions	Strengthens governance, rule of law, and institutional effectiveness.

SDG 17	Partnerships for the Goals	Promotes institutional collaboration and global partnerships.

Semester-VIII

Code	Course Title	Credit	L-T-P
EC40002	APPLIED ECONOMETRICS	4	3-1-0

Course Learning Objectives:

Applied Econometrics aims to equip students with the practical skills and knowledge necessary to analyze economic data and test economic theories using statistical methods. Building upon the foundational principles of econometrics, this course focuses on the application of econometric techniques to real-world economic problems. Students will learn how to collect, clean, and manage economic data, as well as how to estimate and interpret econometric models effectively. Through hands-on exercises and projects, students will develop proficiency in using statistical software to conduct empirical analysis and communicate econometric results. The course emphasizes the importance of empirical research in economics and prepares students for careers in academia, government, and the private sector.

Pedagogy:

Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

CO1: Develop a solid understanding of applied econometric techniques, including model specification, estimation, and inference.

CO2: Gain proficiency in using statistical software packages (such as Stata, R, or Python) to analyze economic data and estimate econometric models.

CO3: Acquire the ability to critically evaluate empirical studies in economics, assessing the validity of econometric methods and interpretations of results.

CO4: Apply econometric techniques to analyze real-world economic data and test hypotheses, drawing meaningful conclusions and insights from empirical analysis.

CO5: Demonstrate effective communication of econometric analysis, both in written reports and oral presentations, using appropriate statistical methods and interpretation of results.

CO–PO Mapping Table

COs/POs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO1	PSO2	PSO3	PSO4
CO1	1	3	2	2	3	2	1	2	2	1	1	1	3	2	1	1
CO2	1	3	2	3	3	3	1	3	2	1	2	1	3	3	2	1
CO3	1	3	2	3	3	3	1	2	2	1	2	1	2	3	3	2
CO4	2	2	3	3	3	3	2	3	2	2	3	1	2	3	3	3
Average	1.25	2.75	2.25	2.75	3	2.75	1.25	2.5	2	1.25	2	1	2.5	2.75	2.25	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

2- 3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

UNIT-I Regression Model: (12 Lectures)

Assumptions of the Classical Linear Regression Model, OLS Estimation, R2 and Adjusted R2 criteria, Akaike's Information Criterion and Schwarz's Information Criterion.

UNIT-II- Regression Model I: (12 Lectures)

Diagnostic Testing: Sources, Detection and remedial measures for Multi-collinearity, Autocorrelation and Heteroscedasticity in regression. Tests of Specification errors: Detecting the presence of unnecessary variables, omitted variables and incorrect functional form (Ramsey RESET and Lagrange Multiplier Test for Adding Variables), Errors of measurement: Consequences and remedial measures.

UNIT-III- Regression Model II: (12 Lectures)

Estimation of Autoregressive Models Instrumental Variable; Estimation, Omitted variables in a simple regression model, Measurement errors.

UNIT-IV- Panel Data Models: (12 Lectures)

Estimation techniques: The Pooled OLS Regression Model, the Fixed Effect Least Squares Dummy Variable Model, the Fixed Effect within Group Estimator, the Random Effects Model.

UNIT-V- Introduction to Econometric Software (GRETL/ E-Views/ R /Stata/ EXCEL: ANY ONE): (12 Lectures)

Generation of data sets and data transformation; Data analysis - Graphs and Plots, Summary Statistics, Correlation Matrix, Running an OLS regression, Collinearity, Autocorrelation, Heteroscedasticity, Normality of residuals

Textbooks Recommended:

Damodar Gujarati, Econometrics by Example, 2nd edition, Palgrave Macmillan

D. N. Gujarati, D.C. Porter and Sangeetha Gunasekar, Basic Econometrics, 5th edition, McGraw Hill, Indian edition.

Additional Resources:

D. N. Gujarati and D.C. Porter, Essentials of Econometrics, 4th Edition, McGraw Hill, International Edition

Jeffrey M. Wooldridge, Introduction to Econometrics: A modern approach, 5th edition, Cengage Learning

.https://youtu.be/ybIcdda4ICw

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Advanced analytical and econometric skill development
SDG 8	Decent Work and Economic Growth	Data-driven decision-making skills
SDG 9	Industry, Innovation and Infrastructure	Use of econometric tools in innovation and policy
SDG 13	Climate Action	Analysis of environmental and climate-related data

Code	Course Title	Credit	L-T-P
EC40004	LABOUR ECONOMICS	4	3-1-0

Course Learning Objectives:

Labor Economics aims to provide students with a comprehensive understanding of the economic principles and theories that govern the functioning of labor markets. This course delves into the study of

labor supply and demand, wage determination, human capital investment, and labor market policies. Students will explore topics such as employment dynamics, income inequality, discrimination, and the impact of technological change on labor markets. Through theoretical analysis and empirical studies, students will gain insights into the complexities of labor market behavior and the factors influencing labor market outcomes. The course also examines the role of government policies and institutions in shaping labor market outcomes and addresses contemporary issues in labor economics.

Pedagogy

Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

CO1: Develop a deep understanding of the theories and models used to analyze labour market behavior, including labour supply and demand, wage determination, and human capital investment.

CO2: Analyze empirical data to assess the impact of labour market policies and institutions on labor market outcomes, such as employment levels, wages, and income inequality.

CO3: Understand the causes and consequences of key issues in labor economics, such as unemployment, labour market discrimination, and technological change.

CO4: Evaluate the effectiveness of government policies aimed at addressing labour market inefficiencies and promoting employment opportunities, including minimum wage laws,

CO5: Apply economic reasoning and analytical tools to analyze real-world labour market phenomena and formulate evidence-based policy recommendations to address labour market challenges.

CO–PO Mapping Table

COs/POs	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	2	3	2	2	2	1	1	1	2	1	1	1	3	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	1	3	3	2	1
CO3	3	3	2	2	3	2	1	1	2	2	2	2	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	2	2	3	3	3
Average	2.5	2.75	2.25	2.5	2.75	1.75	1.25	1	2	1.5	2	1.5	2.75	2.75	2	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

Unit 1: Introduction to Labour Economics (12 Lectures)

Historical development of labour economics; Basic concepts: Labour force participation, labour market equilibrium; Overview of labour market data sources and methodologies; International perspectives on labour markets

Unit 2: Labour Supply and Human Capital (12 Lectures)

Utility maximization and labour-leisure choice; Labour supply decisions over the life cycle; Investment in human capital: education, training, and skills development; Gender dimensions of labour supply and human capital investment

Unit 3: Labour Demand and Wage Determination (12 Lectures)

Theories of labour demand: marginal productivity, monophony power; Determinants of wages: skills, experience, and job characteristics; Wage differentials: factors influencing wage inequality; Impact of minimum wage laws and labor market regulations

Unit 4: Labour Market Inequalities (12 Lectures)

Labour market discrimination: theories, evidence, and measurement; Gender wage gap, racial wage gap, and other forms of inequality; Occupational segregation and its implications, Role of unions and collective bargaining in wage determination

Unit 5: Government Policies and Labour Market Dynamics (12 Lectures)

Unemployment: causes, types, and measurement; Unemployment insurance and its effects on labour market outcomes; Government interventions: minimum wage laws, job training programs; Comparative analysis of labour market policies across countries

Textbooks Recommended

"Labour Economics" by George J. Borjas

Suggested Readings:

"Economics of Labor Markets" by Bruce E. Kaufman

"Modern Labor Economics" by Ronald G. Ehrenberg and Robert S. Smith

Academic articles from journals such as Journal of Labor Economics, Labour Economics, and Indian Journal of Labour Economics.

https://youtu.be/Q3vaZUg3lmM

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 4	Quality Education	Understanding labour market dynamics
SDG 5	Gender Equality	Focus on gender issues in labour markets
SDG 8	Decent Work and Economic Growth	Employment, wages, and labour productivity
SDG 10	Reduced Inequalities	Addressing wage inequality and unemployment

Code	Course Title	Credit	L-T-P
EC40006	ECONOMICS OF HEALTH AND EDUCATION	4	3-1-0

Course Learning Objectives:

The importance of education and health in improving well-being is reflected in the Millennium Development Goals adopted by the United Nations member states, which include among other goals, achieving universal primary education, reducing child mortality, improving maternal health and combating diseases. This course provides a microeconomic framework to analyze, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. The objective is to help in understanding the role of human capital, especially of education and health in economic development.

Pedagogy

Lectures, PowerPoint presentation, Industrial Visits, assignments, Case Discussion, Projects and seminars

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Acquire a deeper understanding to relate the concept of human capital to health and education.

CO2: Possess knowledge of the demand for health, health insurance market and market failure.

CO3: Understand supply of health, health care system and health financing.

CO4: Acquire skills to relate human development with economic development.

CO5: Develop an idea of health sector reform in India and explain why government intervention in healthcare market is desired.

CO–PO Mapping Table

COs/POs	**PO 1**	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3
Average	2.5	2.75	2.25	2.5	2.75	1.75	1.25	1	2	1.5	2	2.5	2.75	2.75	2	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)

3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

UNIT-I Role of Health and Education in Human Development (12 Lectures)

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance, health and education for human capital: distinction between physical and human capital; complementary effect of health and education to human capital.

UNIT-II Microeconomic Foundations of Health Economics **(**12 Lectures)

Demand for health; uncertainty and health insurance market; features of health care market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality, government intervention for health equity.

UNIT-III Health Sector in India: An Overview(12 Lectures)

Health outcomes; health care systems in India; health financing.

UNIT-IV Education: Investment in Human Capital (12 Lectures)

Education: Investment in Human Capital

Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India; demand and supply of education.

UNIT-V Education Sector in India: An Overview (12 Lectures)

Status of educational outcomes: Literacy rates, school participation, school quality measures; government policy and financing of education.

Textbooks Recommended:

William, Jack, Principles of Health Economics for Developing Countries, WorldBank Institute Development Studies, 1999.

Cohn, Elchanan (1972), The Economics of Education, Lexington Books, D.C. Heath and Company, Lexington

Blaug, M.(1970):An Introduction to the Economics of Education, Allen Lane The Penguin Press London.

Berman, P. (Ed.) (1995). Health Sector Reform in Developing Countries: Making Health Development Sustainable, Boston : Harvard Series on Population and International Health.

Kiarman, H.E. (1965), The Economics of Health, Columbia University Press,New York.

Suggested readings

1.World Development Report, Investing in Health, The World Bank, 1993.

2.Zweifel, P.Bryyer,F. and Kifmann,M.(2009): Health Economics, Springer-Verlag Berlin Heidelberg.

3. https://youtu.be/tCx0h8fGDr4

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution
SDG 3	Good Health and Well-being	Understanding health systems and policies
SDG 4	Quality Education	Improving education systems and outcomes
SDG 5	Gender Equality	Equal access to health and education
SDG 10	Reduced Inequalities	Equity in human development sectors

Code	Course Title	Credit	L-T-P
EC40008	Odisha Economy	4	3-1-0

Course Learning Objectives:

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in Odisha in pre- and post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in Odisha, the reading list will have to be updated annually.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Understand macro economy of Odisha.

CO2: Explore appropriate knowledge on agriculture sector development in Odisha.

CO3: Acquire skills on Odisha's industry and infrastructure.

CO4: Develop an idea on environment of Odisha

CO5: Build up knowledge on social sector of Odisha.

CO–PO Mapping Table

COs/ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2	3	2	2	2	1	1	1	2	1	1	2	3	2	1	1
CO2	2	3	2	3	3	2	1	1	2	1	2	2	3	3	2	1
CO3	3	3	2	2	3	2	1	1	2	2	2	3	3	3	2	2
CO4	3	2	3	3	3	2	2	1	2	2	3	3	2	3	3	3
Average	2.5	2.75	2.25	2.5	2.75	1.75	1.25	1	2	1.5	2	2.5	2.75	2.75	2	1.75

1- Weakly Mapped (Low) 2- Moderately Mapped (Medium)
2- 3- Strongly Mapped (High) "_" means there is no correlation

Course Inputs:

UNIT-I Macro Economy of Odisha (12 Lectures)

A macro glance of Odisha economy: aggregate income, broad sectoral decomposition, performance of districts, employment, child labour and bonded labour, employment programmes, consumption expenditure, cost of living; Odisha State public finances.

UNIT-II Agriculture Sector Development in Odisha (12 Lectures)

Agriculture: land ownership and land tenure, agricultural wages and rural unemployment, production and productivity of major crops, agricultural inputs, agricultural policy; Animal Husbandry; Fisheries.

UNIT-IIIIndustry and Infrastructure in Odisha (12 Lectures)

Industry: Investment, industrial policy, and the growth of large industries, mining and quarrying; Construction; tertiary sector: tourism, transport and power;

UNIT-IV Environment in Odisha (12 Lectures)

Land Resources, Water Resources and Forest Resources

UNIT-V Social Sector in Odisha (12 Lectures)

Poverty: income poverty and inequality; health sector: outcomes, infrastructure, finance, public health, NRHM; education: Literacy, Primary education, secondary education, higher education, SSA; human development.

Textbooks Recommended:

Nayak, P., Panda, S. C., Pattanaik, P. K. (2016): The Economy of Odisha: A Profile, Oxford University Press, New Delhi

Suggested Reading

1. GoO (Latest): Odisha Economic Survey, Planning and Convergence Department, Directorate of Economics and Statistics, Government of Odisha, Bhubaneswar

2.. GoO (2018): 80 Years Odisha Budget: Commemorative Volume, Department of Finance, Bhubaneswar

3. Das, Binod S. (1976a): Orissa's Economy in the Nineteenth Century, Social Scientist, 4(11): 32-46. 7. Das, Binod S. (1976b): Orissa's Economy in the Nineteenth Century: Part Two, Social Scientist, 4(12): 38-50.

4. GoO (2016): Commemorative Volume on 80 Years Odisha Budget: Since 1936- 37, CEFT-XIMB and Department of Finance, Government of Odisha

GoO (2012): Odisha Economic Survey 2015-16, Planning and Convergence Department, Directorate of Economics and Statistics, Government of Odisha, Bhubaneswar

5.GoO (2004): Human Development Report 2004 Orissa, Planning and Coordination Department, Government of Odisha, Bhubaneswar

6. Mahapatro, S. B. (1980): Inter-Industry Wage Differentials in Orissa: An Empirical Analysis, Indian Journal of Industrial Relations, 15(4): 525-536.

7. Vyasulu, V. and Arun, A. V. (1997): Industrialization in Orissa: Trends and Structure, Economic and Political Weekly, 32(22): M46-M53.

8. Mohanti, K. K. and Padhi, S. (1995): Employment Situation of Tribal Population in Orissa: 1981 Census Data, Economic and Political Weekly, 30(29): 1879-1882.

9. Nair, K. R. G. (1993): New Economic Policy and Development of Backward Regions: A Note on Orissa, Economic and Political Weekly, 28(19): 939-941.

10. Mohanty, B. (1993): Orissa Famine of 1866: Demographic and Economic Consequences, Economic and Political Weekly, 28(1/2): 55-66.

11. Haan, A. de and Dubey, A. (2005): Poverty, Disparities, or the Development of Underdevelopment in Orissa, Economic and Political Weekly, 40(22/23): 2321- 2329.

12. Samal, K. C. (1998): Poverty Alleviation after Post-Liberalization: Study of a Tribal Block in Orissa, Economic and Political Weekly, 33(28): 1846-1851

13. Nayak, P. and Chatterjee, B. (1986): Disguised Unemployment in Agriculture: A Case Study of Rural Orissa, Indian Journal of Industrial Relations, 21(3):

SDG Mapping for this Course

SDG No.	SDG Title	Nature of Contribution

SDG 1	No Poverty	State-level poverty reduction strategies
SDG 8	Decent Work and Economic Growth	Regional development and employment
SDG 10	Reduced Inequalities	Addressing regional and social disparities
SDG 15	Life on Land	Sustainable use of natural resources

Minor Course: (Single and Double)

Code	Course Title	Credit	L-T-P
EC42002	**Basics of Law and Labour Economics (Minor)**	4	3-1-0

Course Objectives:

This course introduces the basics of law and labor economics, examining the legal frameworks governing labor markets and the economic principles underlying labor market behavior. It explores the interaction between legal institutions, labor regulations, and economic outcomes, with a focus on understanding labor market dynamics, employment relationships, and worker rights. Emphasis is placed on analyzing the role of law in shaping labor market outcomes and addressing issues such as employment discrimination, wage determination, and labor market flexibility.

Course Learning Outcomes:

Upon completion of this course, students will:

CO1: Understand the legal frameworks and regulations governing labor markets.

CO2: Analyze the economic principles underlying labor supply, labor demand, and wage determination.

CO3: Evaluate the impact of labor laws and regulations on labor market outcomes and economic efficiency.

CO4: Apply economic theories and legal principles to analyze contemporary issues in labor economics and employment relations.

CO5: Formulate evidence-based recommendations for labor market policies and reforms to promote inclusive and sustainable employment.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	1	1	1	2	2	2	2	2	1	2	3	2	1	2
CO2	3	3	2	2	2	2	2	2	2	2	2	2	3	3	2	2
CO3	3	3	3	3	2	2	2	2	2	2	2	3	3	3	3	2
CO4	3	3	3	3	3	2	2	3	2	3	2	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Course Inputs:

Unit I: Introduction to Labor Economics (12 Lectures)

Scope and methodology of labor economics, including labor market analysis, labor supply, and labor demand.

Unit II: Legal Frameworks in Labor Markets **(12 Lectures)**

Legal frameworks governing labor markets including employment contracts, labor standards, and employment discrimination laws.

Unit III: Labor Market Dynamics **(12 Lectures)**

Explore theories of labor market dynamics, including unemployment, job search, and labor market segmentation.

Unit IV: Wage Determination and Compensation **(12 Lectures)**

Theories of wage determination, including labor market equilibrium, human capital theory, and minimum wage laws.

Unit V: Labor Market Policies and Reforms **(12 Lectures)**

Assess the effectiveness and implications of labor market policies and reforms, including labor market deregulation, unemployment insurance, and labor market flexibility.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate
b) Quiz
c) PPT Presentation
d) Assignment writing
e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. Borjas, G. J. (2015). Labor Economics. McGraw-Hill Education.

- **Reference Materials & Digital Resources:**

1. Ehrenberg, R. G., & Smith, R. S. (2016). Modern Labor Economics: Theory and Public Policy. Routledge.
2. Budd, J. W. (2013). Labor Relations: Striking a Balance. McGraw-Hill Education.

Note: Latest edition of books may be used.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 1	No Poverty	Supports employment generation and labour welfare for poverty reduction.
SDG 4	Quality Education	Enhances legal and economic understanding of labour systems and employment issues.
SDG 5	Gender Equality	Promotes equal opportunity, non-discrimination, and gender equity in labour markets.
SDG 8	Decent Work and Economic Growth	Strengthens labour rights, productive employment, and fair wage systems.
SDG 10	Reduced Inequalities	Encourages inclusive labour markets and equitable access to employment opportunities.
SDG 16	Peace, Justice and Strong Institutions	Supports labour justice, legal compliance, and fair employment institutions.
SDG 17	Partnerships for the Goals	Promotes collaboration among workers, employers, unions, and policymakers.

Code	Course Title	Credit	L-T-P
EC42004	**Financial Economics (Double Major)**	4	3-1-0

Course Objectives:

This course intends to explain the ideas on financial system in India, financial inclusion and Money and Capital Market. It will help the students to enhance their knowledge on concepts like financial institutions, instruments and money and capital markets, their functioning and usage in real world.

Course Learning Outcomes:

Upon the successful completion of this course, a student will be able to:

CO1: Understand the structure of the financial system and functions of the financial sector.

CO2: Analyze different theories of interest rate determination and financial sector reforms in India.

CO3: Evaluate the features and problems of Indian money market.

CO4: Assess the effectiveness and efficiency of Indian financial market and functions of SEBI.

CO5: Apply economic analysis to evaluate Non-Banking Financial Companies, its role and functions in financial markets.

CO–PO-PSO Mapping Matrix using standard correlation levels:
3 = High, 2 = Medium, 1 = Low, – = No correlation

COs \ POs & PSOs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4
CO1	3	2	1	1	1	2	1	2	2	2	1	2	3	2	1	2
CO2	3	3	2	2	2	2	1	2	2	2	2	2	3	3	2	2
CO3	3	3	3	2	2	2	1	2	2	2	2	3	3	3	3	2
CO4	3	3	3	3	2	3	2	3	3	3	2	3	3	3	3	3
CO5	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3

Course Inputs:

Unit I: Financial System **(Lecture- 12 hours)**

The structure of the financial system- Functions of the financial sector-Indicators of financial development; Financial System and Economic Development; financial inclusion: concept and its evolution; policy initiatives on financial inclusion.

Unit II: Interest Rate Policy **(Lecture- 12 hours)**

Theories of interest rate determination-Level of interest rates-Long period and short period rates- Administered interest rates; Deregulation of interest rates; financial sector reforms in India.

Unit III: Money Market (Lecture- 12 hours)

Money Market: features; objectives; and importance of money market; composition of money market; money market institutions and instruments; features and problems of Indian money market.

Unit IV: Capital Market (Lecture- 12 hours)

Capital market: composition; Primary and secondary market for securities. Functions of new issue and secondary market; organizations of stock exchanges in India; defects in Indian stock exchange; SEBI; its objectives and functions.

Unit V: Non-Banking Financial Companies (Lecture- 12 hours)

Non-Banking Financial Companies: Hire purchase Companies-Venture Capital Companies. Insurance Sector: objectives, functions, life insurance and general insurance; IRDA and its role and functions in financial markets.

Skill Development Activities/Practical Exercise:

a) Group discussion/Debate

b) Quiz

c) PPT Presentation

d) Assignment writing

e) Seminars

Recommended Learning Resources

- **Textbooks:**

1. L.M.Bhole: Financial institutions and Market, Tata McGraw hill, New Delhi.

- **Reference Materials & Digital Resources:**

1. Gorden&Natrajan: Financial Market and institutions, Himalaya Publishing house.

SDG Mapping with SDG Title and Contribution:

SDG No.	SDG Title	Contribution of the Course
SDG 4	Quality Education	Enhances financial literacy, analytical skills, and understanding of financial systems.
SDG 5	Gender Equality	Promotes inclusive financial access and gender-sensitive financial participation.
SDG 8	Decent Work and Economic Growth	Supports efficient financial intermediation, investment, and economic development.
SDG 9	Industry, Innovation and Infrastructure	Encourages financial innovation, institutional development, and market infrastructure.
SDG 10	Reduced Inequalities	Promotes financial inclusion and equitable access to financial markets.
SDG 16	Peace, Justice and Strong Institutions	Strengthens regulatory governance, transparency, and responsible financial systems.
SDG 17	Partnerships for the Goals	Encourages institutional cooperation and coordinated financial development.



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