

Central University of Andhra Pradesh
(Mentor University – University of Hyderabad)

**Minimum qualifications for admission to various courses and intake
for the academic year 2018-19 (July 2018 Session)**

Course	Subject	Intake	Minimum qualifications
B.Sc.(Hons)	Economics	30	+2 Science/Arts/Commerce with Mathematics at +2 level
B.A. (Hons)	Political Science	30	With +2 level of education (Intermediate/CBSE/ICSE/HSC or equivalent in Science/Arts/Commerce/ other streams
M.A.	Telugu	25	With at least 50% marks in the Bachelor's degree with at least 50% marks in Telugu as optional subject; OR with at least 50% marks in the Bachelor's degree with at least 55% marks in Telugu as the compulsory subject.
M.A.	English Language and Literature	25	50% marks in the Bachelors Degree with at least 50% marks in English as Optional Subject OR 50% marks in Bachelors Degree with 55% marks in any literature / English as Compulsory Subject.
B.Voc.	Tourism and Travel Mgt.	30	<p>a) To be eligible for admission to a bachelor's vocational degree programme of study, a candidate must have secured a minimum of 45% of the aggregate marks in class +2 level of a recognized Board of School Education or an equivalent grade/NSQF certification level, admission to first semester or level 4 of bachelor's vocational degree programme under NSQF can be made as per following categorization unless otherwise prescribed by Advisory Committee of Bachelor's of Vocational Degree Programmes</p> <p>Category-1: Candidates who have already acquired 50 prescribed NSQF certification level in a particular industry sector and opted for admission in the Bachelor's of vocational degree programme under same sector for which he/she was previously certified at school level.</p> <p>Category-2: students who have acquired requisite NSQF certification Level but may like to change their sector and may enter in B.Voc course in a different sector.</p> <p>Category-3: Students who have passed 10+2 examination with conventional schooling without any background of vocational training.</p> <p>Category-4: Students who have qualified equivalent examination from polytechnic in the same field may also be considered eligible.</p>
B.Voc.	Retail Management and IT	30	<p>b) Equal weightage, at par with other subjects, would be given to vocational subjects at +2 level while considering candidates for admission.</p> <p>Syllabus for the entrance test (Common Exam Paper) will be consisting of 100 Multiple Choice Objective Questions with four options from the following:</p> <p>Arithmetic Ability, Quantitative Aptitude, Data Interpretation, General Knowledge, Logical Reasoning, Verbal Ability, Verbal Reasoning, English Grammar and Computer Fundamentals.</p>

Schedule for the Entrance Examinations 2018-19

Release of admission announcement	14.6.2018	Thursday
Commencement of online submission	15.6.2018	Saturday
Last date for submitting online application	30.6.2018	Saturday
Downloading of Hall tickets for written test	3.7.2018	Tuesday
Entrance Examinations (written test)	8.7.2018	Sunday
Receipt of answer books/OMRs by the CE	9.7.2018	Monday
OMR Evaluation	10.7.2018	Tuesday
	11.7.2018	Wednesday
Notification of list of selected /waitlisted candidates on the website	16.7.2018	Monday
Admission counseling	30.7.2018	Monday
Commencement of classes	1.8.2018	Wednesday

Date/Day	Courses		Session
8.7.2018 Sunday	B.Sc. (Hons)	Economics	9-11 AM
	M.A.	Telugu	9-11 AM
	B.Voc.	Tourism and Travel Management	12-2 PM
	B.Voc.	Retail Management and IT	12-2 PM
	B.A. (Hons)	Political Science	3-5 PM
	M.A.	English Language and Literature	3-5 PM

CENTRAL UNIVERSITY OF ANDHRA PRADESH

B. Sc. (Hon.) Economics

Principles of Economics

Semester – I

Credits – 4

Objective:

This course introduces the students to basic concepts in economics, economic problems and basics of economic theory. An important component of this course comprises of basic principles of microeconomics focusing on the decision making of individual consumers and firms. Subsequently, the course deals with the economic questions at an aggregate level such as output/income, inflation, interest rates, and government spending. Students will also be introduced to basic tools to analyse economic phenomena.

Course Outline:

1. Introducing the economic problem: scarcity and choice; Different economic systems.
2. Thinking like an economist with basic concepts of costs, benefits, flow and stock variables, short and long run, efficiency, equilibrium.
3. Microeconomic analysis – Market: demand, supply, and the price system, Consumer choice and consumer equilibrium. Production process: Behaviour of profit maximizing firms and the producer equilibrium.
4. The Macro economy: Macroeconomic concerns like Output growth, Unemployment, and Inflation. Role of the Government and the Central Bank in macroeconomic policies. Introduction to debates in macroeconomics.

Basic Readings:

1. Case, Karl E. and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th edition, 2007.
2. Mankiw, Gregory N.: *Principles of Economics*, Cengage Learning, India, 6th edition.
3. Stiglitz, J. E. and C. E. Walsh, *Principles of Economics*, WW Norton and Company, NY, (4th edition).

CENTRAL UNIVERSITY OF ANDHRA PRADESH

B. Sc. (Hon.) Economics

Mathematics for Economics – I

Semester – I

Credits – 4

Objective:

The B. Sc. (Hons) in Economics includes two courses in basic mathematics – one in each semester. This is the first of these two courses. The courses are designed to build the mathematical foundations of the students by equipping them with basic mathematical methods that are essential for learning and working with economic theories and models and are also required for statistics and econometrics courses that come later in this programme. This first course also introduces the students to a bare minimum language of sentential/predicate logic and the meaning and structure of proofs in economic models. The ideas in dealing with sets of points, sequences and convergence concepts are introduced in the first of two courses. The first course then functions of one variable and the work with various aspects for such functions. The second of these two courses moves on to dealing with two or more variables. It includes basic tools for linear models, and optimization problems involving multiple factors, including those with constraints, which are typically found in economic decision making.

Course Outline

- I. Preliminaries: (a) Sets and operations; (b) Number; Combinatorics – principles of counting; Series and progressions; Compounding, discounting and rate of growth; (c) Vectors: basic operations on vectors; (d) Basic ideas in predicate logic - operations; types of proof of a proposition; use of universal and existential quantifiers. (10 hours)
- II. Relations, functions and correspondences; Binary relations and their properties. (3 hours)
- III. Sets of points: binary relations and ordering of sets; sequence of points and convergence of sequences; bounds, bounded sets; closed and open sets, compact sets; connected and convex sets. (6 hours)
- IV. Functions of one variable: graph of a function; types of functions – linear, polynomial (including quadratic), exponential, logarithmic and periodic functions. (6 hours)
- V. Limit, continuity and derivatives of a function of one variable; higher order derivatives; Intermediate value and mean value theorems; Concave and convex functions; zeroes of a function, critical values and stationary points. Optimization in one variable: absolute and relative optima. Polynomial approximation and Taylor expansion. (10 hours)
- VI. Integration: Concept; Rules and techniques of integration of function of one variable; Indefinite and definite integrals; Integration with respect to several variables; Applications to consumer's surplus and producer's surplus. (6 hours)
- VII. Difference equations: discrete change. (4 hours)

Basic Readings:

1. Chiang, A.C. and Kevin Wainwright: *Fundamental Methods of Mathematical Economics*, McGraw Hill, 4th Edition, 2004.
2. Klein, Erwin: *Mathematical Methods in Theoretical Economics*, Academic Press
3. Simon, Carl P and Lawrence Blume: *Mathematics for Economists*, Viva Books, 2010.
4. Sydsaeter, Knut, Peter Hammond, Arne Strom, and Andrés Carvajal: *Essential Mathematics for Economic Analysis*, Pearson, 5th edition, 2016.

CENTRAL UNIVERSITY OF ANDHRA PRADESH

B. Sc. (Hon.) Economics

Mathematics for Economics – II

Semester – II

Credits – 4

Objective:

The B. Sc. (Hons) in Economics includes two courses in basic mathematics – one in each semester. This is the first of these two courses. The courses are designed to build the mathematical foundations of the students by equipping them with basic mathematical methods that are essential for learning and working with economic theories and models and are also required for statistics and econometrics courses that come later in this programme. This first course also introduces the students to a bare minimum language of sentential/predicate logic and the meaning and structure of proofs in economic models. The ideas in dealing with sets of points, sequences and convergence concepts are introduced in the first of two courses. The first course then functions of one variable and the work with various aspects for such functions. The second of these two courses moves on to dealing with two or more variables. It includes basic tools for linear models, and optimization problems involving multiple factors, including those with constraints, which are typically found in economic decision making.

Course Outline

I. Linear algebra:

(a) Vectors and vector spaces: metric – distance function; vector space, half space and hyperplanes; linear independence and basis of a vector space; scalar product, norm and orthogonality. (5 hours)

(b) Matrices and matrix operations; Determinants; quadratic forms and positive/negative definiteness; system of linear equations and their solutions; Input-output models; Eigen values and eigen vectors. (9 hours)

II. Functions of several variables: Characterization: graphical representation of functions of two variables; partial derivatives (of first and higher orders); directional derivatives; Hessian matrix, linear, convex and concave functions; Homogenous and homothetic functions; Total differentiation; Taylor series and approximation of a function; Derivatives for a vector valued function; Jacobian matrix and its uses: functional dependence among functions of several variables; Implicit function theorem and its applications – comparative statics. (12 hours)

III. Optimization (Maxima and Minima) of differentiable functions: Unconstrained optimization for scalar valued functions of one and several variables – necessary and sufficient conditions – conditions on Hessian matrix; Constrained optimization of scalar valued functions of two and several variables – Lagrangean and bordered Hessian matrix, Lagrange multiplier and its interpretation; Envelope theorem. (12 hours)

IV. Differential equations and their solutions. (8 hours)

Basic Readings:

1. Chiang, A.C. and Kevin Wainwright: *Fundamental Methods of Mathematical Economics*, McGraw Hill, 4th Edition, 2004.
2. Klein, Erwin: *Mathematical Methods in Theoretical Economics*, Academic Press
3. Simon, Carl P and Lawrence Blume: *Mathematics for Economists*, Viva Books, 2010.
4. Sydsaeter, Knut, Peter Hammond, Arne Strom, and Andrés Carvajal: *Essential Mathematics for Economic Analysis*, Pearson, 5th edition, 2016.

CENTRAL UNIVERSITY OF ANDHRA PRADESH

B. Sc. (Hon.) Economics

Microeconomics – I

Semester – II
Credits – 4

Objective:

This course introduces the basics of consumer behavior, production and costs. Further competitive markets, derivation of supply curve, and monopoly are discussed.

Course Outline:

1. Consumption decision and consumer theory: Demand, Preferences, Graphical representation – Indifference curves, Budget constraint; Choice – Normal goods; Inferior goods; Income consumption curves, Price consumption curves, Engel curves; Income and substitution effects of a price change.
2. Production function; law of variable proportions, returns to scale; isoquants; choice of inputs, cost of production, cost functions and cost curves in short and long runs; Ideas underlying financing a firm.
3. Competitive markets and the supply curve, profit maximization, determination of equilibrium output and price.
4. Monopoly, price discrimination, natural monopoly.

Basic Readings:

1. Mankiw, Gregory N.: Principles of Economics, Cengage Learning, India, 6th edition.
2. Pindyck, Robert and Daniel Rubinfeld. *Microeconomics*, Pearson Higher Education, 2009.
3. Varian, Hal R., *Intermediate Microeconomics, a Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010.