

Indian Institute of Technology Kanpur
Dean of Academic Affairs Office

OARS Course Master Database (as on 08-SEP-2016)
Dept.-wise list of courses without course contents

Course No.	L-T-P-D-C	Pre-requisite	Course Contents/References	Course Title
** Department of AE **				
AE472A	3-0-0-0-9		Course Contents: References/Text Books:	UNDERGRADUATE PROJECT III
AE608	3-0-0-0-4		Course Contents: References/Text Books:	HEAT TRANSFER IN AEROSPACE APPLICATIONS
AE608A	3-0-0-0-9		Course Contents: References/Text Books:	HEAT TRANSFER IN AEROSPACE APPLICATIONS
AE654	3-0-0-0-4		Course Contents: References/Text Books:	COMBUSTION PROBLEMS IN ROCKET PROPULSION
AE654A	3-0-0-0-9		Course Contents: References/Text Books:	COMBUSTION PROBLEMS IN ROCKET PROPULSION
AE698B	3-0-0-0-4		Course Contents:	MECHANICS OF HIGHLY DEFORMABLE STRUCTURES

			References/Text Books:	
AE704	3-0-0-0-4		Course Contents: References/Text Books:	DEFORMATION AND FRACTURE
** Department of BSBE **				
BSE352	3-0-0--4	#	Course Contents: References/Text Books:	BIOMATERIALS
BSE421A	3-0-0-2-11		Course Contents: References/Text Books:	TISSUE ENGINEERING
BSE460	0-0-0-2-4		Course Contents: References/Text Books:	TRENDS IN BIOLOGY AND BIOENGINEERING RESEARCH
BSE462	2-0-4--4		Course Contents: References/Text Books:	METHODS IN BIO-TECHNOLOGY-1
BSE492	3-0-0-0-4		Course Contents: References/Text Books:	METHODS IN BIOTECHNOLOGY-I, EXPERIMENTAL BIOSEPERATION
BSE492A	3-0-0-0-9	BSE222A	Course Contents: References/Text Books:	METHODS IN BIOTECHNOLOGY-I, EXPERIMENTAL BIOSEPERATION
BSE615	3-0-0--4		Course Contents: References/Text Books:	BIOELECTRICITY

BSE615A	3-0-0-0-9		Course Contents: References/Text Books:	BIOELECTRICITY
BSE616	3-0-0-0-4		Course Contents: References/Text Books:	BIOPHARMACEUTICALS
BSE616A	3-0-0-0-9		Course Contents: References/Text Books:	BIOPHARMACEUTICALS
BSE630	3-0-0--4		Course Contents: References/Text Books:	DEVELOPMENTAL BIOLOGY I
BSE630A	3-0-0-0-9		Course Contents: References/Text Books:	DEVELOPMENTAL BIOLOGY I
BSE638	3-0-0-0-4		Course Contents: References/Text Books:	STRUCTURAL BASIS OF PROTEIN FUNCTION
BSE640	3-0--0-4		Course Contents: References/Text Books:	BIOMATERIALS
BSE640A	3-0-0-0-9		Course Contents: References/Text Books:	BIOMATERIALS
BSE641	3-0-0-0-4		Course Contents: References/Text Books:	BIOLOGY LAB

BSE655	3-0-0-0-4		Course Contents: References/Text Books:	PHYSIOLOGY
BSE655A	3-0-0-0-9		Course Contents: References/Text Books:	PHYSIOLOGY
BSE671	1-0-5--4		Course Contents: References/Text Books:	RESEARCH METHODS IN BIOLOGICAL SCIENCES
BSE680	3-0-0-0-4		Course Contents: References/Text Books:	BIOPHARMACEUTICALS
BSE680A	3-0-0-0-9		Course Contents: References/Text Books:	BIOPHAMACEUTICALS
BSE681	3-0-0-0-4		Course Contents: References/Text Books:	BIOLOGY LABORATORY
BSE681A	3-0-0-0-9		Course Contents: References/Text Books:	BIOLOGY LABORATORY
BSE682	1-0-5-0-4		Course Contents: References/Text Books:	SPECIAL TOPICS IN BIOLOGICAL SCIENCES AND BIOENGINEERING

**** Department of CE ****

CE311A	3-0-3-0-12	CHM101A MTH101A	Course Contents: References/Text Books:	ENVIRONMENTAL QUALITY AND POLLUTION
CE641A	3-0-0-0-5		Course Contents: References/Text Books:	PROJECT MANAGEMENT
CE661	3-0-0-0-4		Course Contents: References/Text Books:	CHARACTERIZATION AND USE OF AGGREGATES IN PAVEMENT SYSTEMS
CE666A	3-0-0-0-9		Course Contents: References/Text Books:	AIR POLLUTION AND ITS CONTROL
EEM610	3-0-0-0-4		Course Contents: References/Text Books:	ENVIRONMENT TOXICOLOGY AND RISK ASSESSMENT
EEM611	3-0-0-0-4		Course Contents: References/Text Books:	INDUSTRIAL WASTE MANAGEMENT
** Department of CHE **				
CHE614	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO HYDRODYNAMIC STABILITY
CHE675	3-0-0-0-4		Course Contents: References/Text Books:	SPECTROSCOPY OF NANOMATERIALS
** Department of CHM **				

CGM700.	----20		Course Contents: References/Text Books:	PROJECT
CHM100	2-0-0-0-0		Course Contents: References/Text Books:	INTRODUCTION TO PROFESSION
CHM303	3-0-0-0-4		Course Contents: References/Text Books:	ORGANIC CHEMISTRY I
CHM343	0-0-6-0-4	CHM101N	Course Contents: References/Text Books:	INORGANIC CHEMISTRY LAB
CHM361A	0-0-2-0-2		Course Contents: References/Text Books:	CHEMISTRY COMMUNICATION SKILLS
CHM404	0-0-6-0-2	#	Course Contents: References/Text Books:	ORGANIC CHEMISTRY LAB.
CHM443	0-0-6-0-2	#	Course Contents: References/Text Books:	INORGANIC CHEMISTRY LAB
CHM443A	0-0-6-0-6		Course Contents: References/Text Books:	INORGANIC CHEMISTRY LAB
CHM482	3-0-0-0-4		Course Contents: References/Text Books:	CHEMISTRY AND OUR ENVIRONMENT

CHM627	3-0-0-0-4		Course Contents: References/Text Books:	METHODS OF ELECTRONIC STRUCTURE CALCULATION
CHM627A	3-0-0-0-9		Course Contents: References/Text Books:	METHODS OF ELECTRONIC STRUCTURE CALCULATION
CHM645	3-0-0-0-4		Course Contents: References/Text Books:	ORBITAL INTERACTIONS IN CHEMISTRY
CHM676	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO BIONANOTECHNOLOGY
CHM676A	3-0-0-0-9		Course Contents: References/Text Books:	INTRODUCTION TO BIONANOTECHNOLOGY
CHM683	3-0-0-0-4		Course Contents: References/Text Books:	SURFACES, INTERFACES, THIN FILMS & RELATED ANALYTICAL TECHNIQUES
CHM683A	3-0-0-0-9		Course Contents: References/Text Books:	SURFACES, INTERFACES, THIN FILMS & RELATED ANALYTICAL TECHNIQUES
SE341	3-0-0-0-4		Course Contents: References/Text Books:	BIO-INORGANIC CHEMISTRY
SE344	3-0-0-0-4		Course Contents: References/Text Books:	CHEMISTRY AND OUR ENVIRONMENT

**** Department of COM ****

COM200	1-0-2-0-5		Course Contents: References/Text Books:	COMMUNICATION SKILLS: COMPOSITION
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**** Department of CSE ****

CS100	2-0-0-0-0		Course Contents: References/Text Books:	INTRODUCTION TO PROFESSION
CS202	2-0-0-0-2	MTH101N	Course Contents: References/Text Books:	INTRODUCTION TO MATHEMATICAL LOGIC
CS302	2-0-0-0-2	MTH101N	Course Contents: References/Text Books:	INTRODUCTION TO MATHEMATICAL LOGIC
CS351A	0-0-3-0-3		Course Contents: References/Text Books:	CSE
CS497	3-0-0--4		Course Contents: References/Text Books:	SPECIAL TOPICS IN COMPUTER SCIENCE
CS620	3-0-0-0-4		Course Contents: References/Text Books:	MICROPROCESSOR DESIGN METHODOLOGY
CS629	3-0-0-0-4		Course Contents: References/Text Books:	PARALLEL EXECUTION OF PROGRAMS

CS631	3-0-0-0-4		Course Contents: References/Text Books:	CYBER SECURITY OF CRITICAL INFRASTRUCTURES
CS651	3-0-0-0-4		Course Contents: References/Text Books:	CONCURRENT DATA STRUCTURES AND ALGORITHMS
CS677	3-0-0-0-4		Course Contents: References/Text Books:	DATA AND INFORMATION FUSION
CS682	3-0-0--4		Course Contents: References/Text Books:	QUANTUM COMPUTING
CS682A	3-0-0-0-9		Course Contents: References/Text Books:	QUANTUM COMPUTING
CS683A	3-0-0-0-9		Course Contents: References/Text Books:	COMPUTATIONAL ARITHMETIC-GEOMETRY & APPLICATIONS
CS684	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO ALGORITHMS AND LOGICS IN GAME THEORY
CS685	3-0-0-0-4		Course Contents: References/Text Books:	DATA MINING
CS686	3-0-0-0-4		Course Contents: References/Text Books:	BIOMETRIC RECOGNITION

CS687	3-0-0-0-4		Course Contents: References/Text Books:	ALGORITHMIC INFORMATION THEORY
CS687A	3-0-0-0-9		Course Contents: References/Text Books:	ALGORITHMIC INFORMATION THEORY
CS688	3-0-0-0-4		Course Contents: References/Text Books:	COMPUTATIONAL ARITHMETIC-GEOMETRY & APPLICATIONS
CS698.D	3-0-0-0-9		Course Contents: References/Text Books:	SPECIAL TOPICS IN DATA COMPRESSION
CS698A	3-0-0-0-9		Course Contents: References/Text Books:	SPECIAL TOPICS IN : GAME THEORY AND ITS APPLICATIONS IN COMPUTER SCIENCE
CS698AW	3-0-0-0-9		Course Contents: References/Text Books:	SPECIAL TOPICS IN : GAME THEORY AND ITS APPLICATIONS IN COMPUTER SCIENCE
CS698B	3-0-0-0-4		Course Contents: References/Text Books:	MATHEMATICS FOR MACHINE LEARNING
CS698C	3-0-0-0-4		Course Contents: References/Text Books:	APPLICATIONS OF SEMI-DEFINITE PROGRAMMING IN COMPLEXITY
CS698D	3-0-0-0-9		Course Contents: References/Text Books:	ARITHMETIC CIRCUIT COMPLEXITY

CS698E	3-0-0-0-9		Course Contents: References/Text Books:	OPTIMIZATION TECHNIQUES
CS698F	3-0-0--9		Course Contents: References/Text Books:	ADVANCED DATA MANAGEMENT
CS698G	3-0-0--2	CS601	Course Contents: References/Text Books:	INTRODUCTION TO UNIVERSAL ALGEBRA
CS698GT	3-0-0--4		Course Contents: References/Text Books:	GRAPH THEORY
CS698H	3-0-0--4		Course Contents: References/Text Books:	ADVANCED NATURAL LANGUAGE PROCESSING
CS698I	3-0-0-0-9		Course Contents: References/Text Books:	FORMAL METHODS FOR ROBOTICS AND AUTOMATION
CS698J	3-0-0-0-9		Course Contents: References/Text Books:	TOPICS IN LINEAR PROGRAMMING
CS698K	3-0-0-0-9		Course Contents: References/Text Books:	APPLICATIONS OF SEMI-DEFINITE PROGRAMMING IN COMPLEXITY
CS698L	3-0-0-0-4		Course Contents: References/Text Books:	ONLINE LEARNING AND OPTIMIZATION

CS698M	3-0-0-0-5		Course Contents: References/Text Books:	INTRODUCTION TO UNIVERSAL ALGEBRA
CS698N	3-0-0--9		Course Contents: References/Text Books:	RECENT ADVANCES IN COMPUTER VISION
CS698O	3-0-0-0-4		Course Contents: References/Text Books:	ADVANCED DATA MANAGEMENT
CS698P	3-0-0-0-4		Course Contents: References/Text Books:	APPLICATIONS OF MARKOV CHAINS IN COMPUTING
CS698Q	3-0-0--4		Course Contents: References/Text Books:	PROBABILISTIC INFERENCE
CS698R	3-0-0-0-4		Course Contents: References/Text Books:	TOPICS IN LINEAR PROGRAMMING
CS698S	0-0-3--4		Course Contents: References/Text Books:	S/W DESIGN FOR HIGH PERFORMANCE ARCHITECHTURE
CS698T	3-0-0-0-9		Course Contents: References/Text Books:	TYPE THEORETIC FOUNDATIONS OF PROGRAMMING LANGUAGES
CS698U	0-0-3--4		Course Contents: References/Text Books:	CODING THEORY

CS698V	3-0-0-0-4		Course Contents: References/Text Books:	DATA MINING
CS698W	3-0-0--4	#	Course Contents: References/Text Books:	SPECIAL TOPICS IN : GAME THEORY AND ITS APPLICATIONS IN COMPUTER SCIENCE
CS698WA	3-0-0-0-9		Course Contents: References/Text Books:	SPECIAL TOPICS IN : GAME THEORY AND ITS APPLICATIONS IN COMPUTER SCIENCE
CS698X	3-0-0-0-9		Course Contents: References/Text Books:	PROBABILISTIC MACHINE LEARNING
CS698Y	3-0-0--4		Course Contents: References/Text Books:	TOPICS IN OBJECT ORIENTED LANGUAGE IMPLEMENTATION
CS698Z	3-0-0-0-9		Course Contents: References/Text Books:	ONLINE LEARNING AND OPTIMIZATION
CS718	3-0-0-0-4		Course Contents: References/Text Books:	SUBLINEAR ALGORITHMS FOR PROCESSING MASSIVE DATA SETS
CS745	3-0-0-0-4		Course Contents: References/Text Books:	SMALL SPACE BOUNDED COMPUTATIONS
CS746	3-0-0-0-4		Course Contents: References/Text Books:	RIEMANN HYPOTHESIS AND ITS APPLICATIONS

CS746A	3-0-0-0-9		Course Contents: References/Text Books:	RIEMANN HYPOTHESIS AND ITS APPLICATIONS
CS771	3-0-0-0-4	ESO209 CS210/ESO211	Course Contents: References/Text Books:	MACHINE LEARNING TECHNIQUES
CS771A	3-0-0-0-9	MSO201A/CS201A ESO207A/CS210A	Course Contents: References/Text Books:	MACHINE LEARNING TECHNIQUES
CS785	3-0-0-0-4		Course Contents: References/Text Books:	MULTIAGENT SYSTEMS : GAMES, ALGORITHMS, EVOLUTION
CS797	0-0-0--4		Course Contents: References/Text Books:	SPECIAL TOPICS IN COMPUTER SCIENCE
SE367	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO COGNITIVE SEIENCE
SE367A	3-0-0-0-9		Course Contents: References/Text Books:	INTRODUCTION TO COGNITIVE SEIENCE
** Department of ECO **				
ECO525A	3-0-0-0-9		Course Contents: References/Text Books:	PLANNING TECHNQUE

ECO752	3-0-0-0-4		Course Contents: References/Text Books:	QUANTITATIVE ANALYSIS OF INTERNATIONAL TRADE
** Department of EE **				
EE100	2-0-0-0-0		Course Contents: References/Text Books:	INTRODUCTION TO PROFESSION
EE401A	0-0-2-0-2		Course Contents: References/Text Books:	ELECTRICAL ENGINEERING COMMUNICATION SKILLS
EE609	3-0-0-0-4		Course Contents: References/Text Books:	CONVEX OPTIMIZATION IN SIGNAL PROCESSING AND COMMUNICATIONS
EE617	3-0-0-0-4		Course Contents: References/Text Books:	INDUSTRIAL AUTOMATION AND CONTROL
EE644	3-0-0--4		Course Contents: References/Text Books:	OPTICAL COMMUNICATION
EE644A	3-0-0-0-9		Course Contents: References/Text Books:	OPTICAL COMMUNICATION
EE674	3-0-0--4	EE370	Course Contents: References/Text Books:	ARCHITECTURE OF MICRO-PROCESSORS & MICROCOMPUTERS

EE674A	3-0-0-0-9		Course Contents: References/Text Books:	ARCHITECTURE OF MICRO-PROCESSORS & MICROCOMPUTERS
EE698	3-0-0--4	#	Course Contents: References/Text Books:	POWER MANAGEMENT CIRCUITS
EE698A	3-0-0-0-9		Course Contents: References/Text Books:	POWER MANAGEMENT CIRCUITS
EE698B	3-0-0-0-9	#	Course Contents: References/Text Books:	CONTROL OF CYBER-PHYSICAL SYSTEM
EE698C	3-0-0--9		Course Contents: References/Text Books:	CONSENSUS IN DISTRIBUTED MULTIAGENT SYSTEM
EE698E	3-0-0-0-9		Course Contents: References/Text Books:	QUANTUM AND WAVE PHENOMENA WITH ELECTRICAL APPLICATION
EE698G	3-0-0-0-9		Course Contents: References/Text Books:	PROBABILISTIC MOBILE ROBOTICS
EE698H	3-0-0-0-9		Course Contents: References/Text Books:	SYNCHROPHASOR TECHNOLOGY AND ITS APPLICATIONS
EE698I	3-0-0-0-9		Course Contents: References/Text Books:	SOLAR PHOTOVOLTAIC TECHNOLOGY

EE698J	3-0-0--9		Course Contents: References/Text Books:	KALMAN FILTERING & APPLICATIONS
EE698K	3-0-0--4		Course Contents: References/Text Books:	CHAOTIC DYNAMICAL SYSTEMS & CONTROL
EE698L	3-0-0-0-4		Course Contents: References/Text Books:	COMPACT MODELING
EE698M	3-0-0-0-9		Course Contents: References/Text Books:	SELECTED TOPICS IN IMAGE & SIGNAL PROCESSING
EE698N	3-0-0-0-9		Course Contents: References/Text Books:	COMPACT MODELING
EE698P	3-0-0-0-9		Course Contents: References/Text Books:	SIMULATION OF COMMUNICATION SYSTEMS
EE698Q	3-0-0-0-9		Course Contents: References/Text Books:	CONVEX OPTIMIZATION IN SP/COM
EE698R	3-0-0-0-9		Course Contents: References/Text Books:	TRANSCEIVER OPTIMIZATION FOR OFDM WIRELESS SYSTEM
EE698S	3-0-0-0-9		Course Contents: References/Text Books:	SPINTRONICS AND QUANTUM TRANSPORT APPLICATION TO SEMICONDUCTOR DEVICES

EE698T	3-0-0--4		Course Contents: References/Text Books:	ADVANCED TOPICS IN MULTIUSER COMMUNICATION
EE698U	3-0-0-0-4		Course Contents: References/Text Books:	SPINTRONICS AND QUANTUM TRANSPORT APPLICATION TO SEMICONDUCTOR DEVICES
EE698UA	3-0-0-0-9		Course Contents: References/Text Books:	SPINTRONICS AND QUANTUM TRANSPORT APPLICATION TO SEMICONDUCTOR DEVICES
EE698V	3-0-0--4		Course Contents: References/Text Books:	SIMULATION OF COMMUNICATION SYSTEMS
EE698W	3-0-0--4		Course Contents: References/Text Books:	CONVEX OPTIMIZATION IN SP/COM
EE698X	3-0-0-0-4		Course Contents: References/Text Books:	ADVANCED MOSEFT MODELING
EE698Y	3-0-0-0-4		Course Contents: References/Text Books:	INDUSTRIAL INSTRUMENTATION FOR PROCESS CONTROL
EE698Z	3-0-0--4	#	Course Contents: References/Text Books:	TRANSCEIVER OPTIMIZATION FOR OFDM WIRELESS SYSTEM

**** Department of ES ****

ES655A	3-1-0-0-11		Course Contents: References/Text Books:	SOLID EARTH GEOPHYSICS
ES656A	2-0-3-0-9		Course Contents: References/Text Books:	GEOPHYSICAL METHODS
** Department of HSS **				
ART410	3-0-1--4		Course Contents: References/Text Books:	VIDEO PRODUCTION - THEORY & PRACTICE
ART705A	3-0-0-0-9		Course Contents: References/Text Books:	MODERN FAR-EASTERN ART
COM200A	1-0-2-0-5		Course Contents: References/Text Books:	COMMUNICATION SKILLS: COMPOSITION
ECO112A	3-1-0-0-11		Course Contents: References/Text Books:	INTRODUCTON TO MACROECONOMIC PROBLEMS AND POLICIES
ECO201.	3-1-0--4		Course Contents: References/Text Books:	MICROECONOMICS - I
ECO409	3-1-0-0-4		Course Contents: References/Text Books:	DYNAMIC MACROECONOMICS

ECO444	3-0-0-0-4		Course Contents: References/Text Books:	EMPIRICAL METHODS IN APPLIED MICROECONOMICS
ECO504A	3-0-0-0-9	ECO201A/ECO221A/ECO101A	Course Contents: References/Text Books:	ECONOMIC ANALYSIS OF LAW
ECO523	3-0-0-0-4		Course Contents: References/Text Books:	ECONOMIC GROWTH THEORY AND PRACTICE
ECO540	3-0-0-0-4	ECO311/ECO312	Course Contents: References/Text Books:	HISTORY OF ECONOMIC DEVELOPMENT
ECO753	3-0-0-0-4		Course Contents: References/Text Books:	LABOUR ECONOMICS
ECO754	3-0-0-0-4		Course Contents: References/Text Books:	GAME THEORY
ECO755	3-0-0-0-4		Course Contents: References/Text Books:	CONTRACT TREORY
ENG121A	----4		Course Contents: References/Text Books:	ENGLISH LANGUAGE AND COMPOSITION
ENG121B	----4		Course Contents: References/Text Books:	ENGLISH LANGUAGE AND COMPOSITION

PHI141.	3-1-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO PHILOSOPHY
PHI784	3-0-0-0-4		Course Contents: References/Text Books:	TWENTIETH CENTURY CONTINENTAL PHILOSOPHY
PSY792	2-0-3-0-4		Course Contents: References/Text Books:	INTRODUCTION TO QUANTITATIVE STATISTICS USING R
PSY792A	2-0-3-0-9		Course Contents: References/Text Books:	INTRODUCTION TO QUANTITATIVE STATISTICS USING R
PSY794	3-0-0-0-4		Course Contents: References/Text Books:	DISASTER MENTAL HEALTH
SOC171.	3-1-0-0-4		Course Contents: References/Text Books:	INTRODUCTORY SOCIOLOGY
** Department of IME **				
IME672	3-0-0-0-4		Course Contents: References/Text Books:	DATA MINING AND KNOWLEDGE DISCOVERY
IME684	3-0-0-0-4		Course Contents: References/Text Books:	SIMULATION AND SCHEDULING OF MANUFACTURING

MBA644	3-0-0--4		Course Contents: References/Text Books:	KNOWLEDGE STRATEGIES & MANAGEMENT
VLM601	0-0-0-0-5		Course Contents: References/Text Books:	PRODUCT DESIGN AND NEW PRODUCT MANAGEMENT
VLM602	0-0-0-0-2		Course Contents: References/Text Books:	SUPPLY CHAIN MANAGEMENT
VLM603	0-0-0-0-2		Course Contents: References/Text Books:	ADVANCE MATERIALS
VLM604	0-0-0-0-3		Course Contents: References/Text Books:	AUTOMATION & ROBOTICS IN MANUFACTURING
VLM605	0-0-0-0-2		Course Contents: References/Text Books:	COMPUTER INTEGRATED MANUFACTURING SYSTEMS
VLM606	0-0-0-0-2		Course Contents: References/Text Books:	DATA ANALYSIS AND DECISION MAKING
** Department of LT **				
LT680	1-0-3--4	LT601 LT631	Course Contents: References/Text Books:	M TECH LAB TECHNIQUES
** Department of MDES **				

DES604	3-0-0-0-4		Course Contents: References/Text Books:	DESIGN THINKING & RESEARCH METHODS
DES604A	2-0-3-0-9		Course Contents: References/Text Books:	DESIGN THINKING & RESEARCH METHODS
DES605	3-0-0-0-4		Course Contents: References/Text Books:	PRODUCT DESIGN AND PROTOTYPING
DES606	3-0-0-0-4		Course Contents: References/Text Books:	INTERACTION DESIGN FOR PHYSICAL PRODUCTS
DES630	3-0-0-0-4		Course Contents: References/Text Books:	FUNDAMENTALS OF GRAPHICS
DES631	2-0-2-0-4		Course Contents: References/Text Books:	PSYCHOLOGICAL PRINCIPLES AND DESIGN
DES633	3-0-0-0-4		Course Contents: References/Text Books:	INTEGRATED PRODUCT DEVELOPMENT-I
DES634	3-0-0-0-4		Course Contents: References/Text Books:	ELECTRONICS FOR DESIGNERS
DES635	2-0-3-0-4		Course Contents: References/Text Books:	METHODS FOR DESIGN RESEARCH

**** Department of ME ****

ME100	1-0-2-0-0		Course Contents: References/Text Books:	INTRODUCTION TO PROFESSION
ME624	3-0-0-0-4	ME681	Course Contents: References/Text Books:	CALCULUS OF VARIATIONS
ME670	3-0-0-0-4		Course Contents: References/Text Books:	ADDITIVE MANUFACTURING
ME672	3-0-0-0-4		Course Contents: References/Text Books:	MICROMANUFACTURING PROCESSES
ME698	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION HYDRODYNAMIC STABILITY
ME698B	3-0-0--9		Course Contents: References/Text Books:	GEOPHYSICAL FLUID DYNAMICS
ME698C	3-0-0-0-9		Course Contents: References/Text Books:	MECHANICS OF ICE
ME698D	3-0-0--4		Course Contents: References/Text Books:	SPECIAL TOPICS : MICROMACHINING

ME698E	3-0-0--4		Course Contents: References/Text Books:	BIO-MEMS AND MICROSYSTEMS
ME698F	3-0-0-0-4	ME681	Course Contents: References/Text Books:	BIFURCATION THEORY
ME698G	3-0-0--4	ME321	Course Contents: References/Text Books:	PHASE TRANSFORMATION
ME698H	3-0-0-0-4		Course Contents: References/Text Books:	VISCOELASTICITY
ME698I	3-0-0--4		Course Contents: References/Text Books:	CONTACT MECHANICS
ME698J	3-0-0-0-4		Course Contents: References/Text Books:	FABRIONICS
ME698K	3-0-0-0-4		Course Contents: References/Text Books:	INTERFACES IN SOLIDS
ME698L	3-0-0-0-4		Course Contents: References/Text Books:	ASYMPTOTICS AND PERTUBATION METHODS
ME698M	3-0-0--4		Course Contents: References/Text Books:	NON - LINEAR FINITE ELEMENT TECHNIQUES IN SOLID MECHANICS

ME698N	3-0-0-0-9		Course Contents: References/Text Books:	NON - LINEAR FINITE ELEMENT TECHNIQUES IN SOLID MECHANICS
ME701	3-0-0-0-4		Course Contents: References/Text Books:	DESIGN FOR MANUFACTURE & ASSEMBLY
** Department of MME **				
MME330.	----4		Course Contents: References/Text Books:	IRON AND STEELMAKING
MME470	3-0-2-0-5	MME370	Course Contents: References/Text Books:	MANUFACTURING PROCESS
** Department of MSE **				
MSE421	3-0-0-0-4		Course Contents: References/Text Books:	IRON AND STEEL MAKING
MSE421A	3-0-0-0-9		Course Contents: References/Text Books:	IRON AND STEEL MAKING
MSE422	3-0-0-0-4		Course Contents: References/Text Books:	SELECTION AND DESIGN OF ENGINEERING MATERIALS
MSE422A	3-0-0-0-9		Course Contents: References/Text Books:	SELECTION AND DESIGN OF ENGINEERING MATERIALS

MSE470	3-0-2-0-5	MSE370	Course Contents: References/Text Books:	MANUFACTURING PROCESS
MSE601	3-0-0-0-4		Course Contents: References/Text Books:	DISPLAY MATERIALS & TECHNOLOGIES
MSE608	3-0-0-0-4		Course Contents: References/Text Books:	MICROSTRUCTURE MODELLING AND SIMULATION
MSE608A	3-0-0-0-9		Course Contents: References/Text Books:	MICROSTRUCTURE MODELLING AND SIMULATION
MSE624	3-0-0-0-4		Course Contents: References/Text Books:	ENERGY MATERIALS AND TECHNOLOGIES
** Department of MTH **				
MSO202	3-1-0-0-2		Course Contents: References/Text Books:	COMPLEX VARIABLES
MSO202A	3-1-0-0-6		Course Contents: References/Text Books:	COMPLEX VARIABLES
MTH101T	3-1-0-1-4		Course Contents: References/Text Books:	MATHEMATICS I SLOW PACED

MTH205	3-1-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO FOURIER SERIES
MTH205A	3-1-0-0-11		Course Contents: References/Text Books:	INTRODUCTION TO FOURIER SERIES
MTH309	3-1-0-0-4		Course Contents: References/Text Books:	PROBABILITY THEORY
MTH425	3-1-0-0-2	MSO201	Course Contents: References/Text Books:	DISTRIBUTIONS IN STATISTICS
MTH426	3-0-0-0-4		Course Contents: References/Text Books:	AN INTRODUCTION TO MATHEMATICAL MODELLING
MTH426A	3-0-0-0-9		Course Contents: References/Text Books:	AN INTRODUCTION TO MATHEMATICAL MODELLING
MTH511.	3-1-0-0-4	ESO209	Course Contents: References/Text Books:	ESSENTIAL OF CODING THEORY
MTH552	----4		Course Contents: References/Text Books:	STATISTICAL & AI TECHIQUES IN DATA MINING
MTH622	3-0-0-0-4	#	Course Contents: References/Text Books:	FRACTAL INTERPOLATION AND APPLICATIONS

MTH622A	3-0-0-0-9		Course Contents: References/Text Books:	FRACTAL INTERPOLATION AND APPLICATIONS
MTH663	3-0-0--4	#	Course Contents: References/Text Books:	ANALYTICAL TECHNIQUES FOR PDE
MTH673	3-0-0-0-4	MTH418	Course Contents: References/Text Books:	ROBUST STATISTICAL METHODS
MTH676	3-0-0-0-4	#	Course Contents: References/Text Books:	ECONOMETRICS
MTH677	3-0-0--4	#	Course Contents: References/Text Books:	SET THEORIES AND LOGICS
MTH679	3-0-0-0-4		Course Contents: References/Text Books:	SPATIO-TEMPORAL MODELS IN MATHEMATICAL BIOLOGY
MTH679A	3-0-0-0-9		Course Contents: References/Text Books:	SPATIO-TEMPORAL MODELS IN MATHEMATICAL BIOLOGY
MTH705	3-0-0-0-4		Course Contents: References/Text Books:	WAVELET METHODS FOR ELLIPTIC PARTIAL DEFFERENTIAL EQUATIONS
MTH706	3-0-0-0-4		Course Contents: References/Text Books:	NUMERICAL ANALYSIS & SCIENTIFIC COMPUTING

MTH706A	3-0-0-0-9		Course Contents: References/Text Books:	NUMERICAL ANALYSIS & SCIENTIFIC COMPUTING
MTH715	3-0-0-0-4		Course Contents: References/Text Books:	FREDHOLM THEORY
MTH719	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO HOMOGENIZATION
MTH719A	3-0-0-0-9		Course Contents: References/Text Books:	INTRODUCTION TO HOMOGENIZATION
MTH720	3-0-0-0-4		Course Contents: References/Text Books:	NUMERICAL SOLUTION OF INTEGRAL EQUATIONS
MTH729	3-0-0-0-4		Course Contents: References/Text Books:	ERGODIC THEORY
MTH739	3-0-0-0-4		Course Contents: References/Text Books:	TOPICS IN LIE GROUPS AND LIE ALGEBRAS
MTH759	3-0-0-0-4		Course Contents: References/Text Books:	ALGEBRIC TOPOLOGY II
MTH759A	3-0-0-0-9		Course Contents: References/Text Books:	ALGEBRIC TOPOLOGY II

**** Department of NET ****

NT661	3-0-0-0-4	NT602/NT611	Course Contents: References/Text Books:	SAFETY ANALYSIS OF NUCLEAR POWER REACTORS
NT661A	3-0-0-0-9	NT602A/NT611A	Course Contents: References/Text Books:	SAFETY ANALYSIS OF NUCLEAR POWER REACTORS
NT698	3-0-0-0-4		Course Contents: References/Text Books:	SPECIAL TOPICS

**** Department of PHY ****

PHY103.	3-1-0-0-11		Course Contents: References/Text Books:	PHYSICS II
PHY557A	3-0-0-0-9		Course Contents: References/Text Books:	BATCHLOR OF SCIENCE PROJECT -III
PHY558A	0-0-1-2-9		Course Contents: References/Text Books:	BATCHLOR OF SCIENCE PROJECT -IV
PHY590B	----4		Course Contents: References/Text Books:	SPECIAL TOPICS IN PHYSICS: ADVANCED FIELD THEORY
PHY610	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO BIOPHOTONICS

PHY632	3-0-0-0-4	#	Course Contents: References/Text Books:	TRANSPORT IN MESOSCOPIC SYSTEMS
PHY645	3-0-0--4		Course Contents: References/Text Books:	ELECTROMAGNETIC METAMATERIALS AND PLASMONICS
PHY651	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO ASTROPHYSICAL FLUID
PHY659	3-0-0-0-4		Course Contents: References/Text Books:	SPECIAL & GENERAL RELATIVITY
PHY663	3-0-0-0-4		Course Contents: References/Text Books:	MATHEMATICAL METHODS II
PHY672	3-0-0--4		Course Contents: References/Text Books:	PHYSICS OF TURBULENCE
PHY679	3-0-0-0-4	PHY680/PHY681	Course Contents: References/Text Books:	THE STANDARD MODEL OF FUNDAMENTAL PHYSICS
PHY682	3-0-0-0-4		Course Contents: References/Text Books:	CONCEPTS OF PLASMA PHYSICS
PHY690B	3-0-0-0-9		Course Contents: References/Text Books:	QUANTUM PHASES IN NANO-SCALE SYSTEM

PHY690C	3-0-0-0-9		Course Contents: References/Text Books:	PRINCIPLES OF LASERS AND DETECTORS
PHY690E	0-0-0--4		Course Contents: References/Text Books:	QUANTUM DYNAMICS
PHY690F	3-0-0--4		Course Contents: References/Text Books:	QUANTUM DYNAMICS: COMPUTATION & INFORMATION
PHY690G	3-0-0--9		Course Contents: References/Text Books:	COHERENCE & QUANTUM ENTANGLEMENT
PHY690H	3-0-0-0-4	#	Course Contents: References/Text Books:	GREEN NANOTECHNOLOGIES
PHY690I	3-0-0-0-4		Course Contents: References/Text Books:	COSMOLOGY
PHY690J	3-0-0--4		Course Contents: References/Text Books:	GROUP THEORY AND ITS APPLICATIONS TO PARTICLE PHYSICS
PHY690K	3-0-0-0-9		Course Contents: References/Text Books:	QUANTUM DYNAMICS, INFORMATION AND COMPUTATION
PHY690L	3-0-0-0-9		Course Contents: References/Text Books:	QUANTUM OPTICS II

PHY690M	3-0-0--9		Course Contents: References/Text Books:	ADVANCED GENERAL RELATIVITY AND BLACK HOLES
PHY690N	3-0-0-0-4		Course Contents: References/Text Books:	GAUGE THEORY AND RENORMALIZATION
PHY690O	3-0-0-0-9		Course Contents: References/Text Books:	GAUGE THEORY AND RENORMALIZATION
PHY690P	3-0-0--4		Course Contents: References/Text Books:	SPINTRONICS
PHY690Q	3-0-0--4		Course Contents: References/Text Books:	COOPERATIVE PHENOMENA IN CLASSICAL & QUANTUM SYSTEMS
PHY690R	3-0-0--4		Course Contents: References/Text Books:	QUANTUM DYNAMICS, INFORMATION AND COMPUTATION
PHY690S	3-0-0--4		Course Contents: References/Text Books:	TYPE II SUPERCONDUCTORS VORTICES & APPLICATIONS
PHY690T	3-0-0-0-9		Course Contents: References/Text Books:	TYPE II SUPERCONDUCTORS VORTICES & APPLICATIONS
PHY690U	3-0-0-0-9		Course Contents: References/Text Books:	ADVANCE GENERAL RELATIVITY AND BLACK HOLES

PHY690W	3-0-0-0-2		Course Contents: References/Text Books:	INTRODUCTION TO HIGH PERFORMANCE COMPUTING FOR SCIENTISTS AND ENGINEERS
PHY690Y	3-0-0-0-4		Course Contents: References/Text Books:	COHERENCE & QUANTUM ENTANGLEMENT
PHY693	3-0-0-0-4		Course Contents: References/Text Books:	INTRODUCTION TO SPINTRONICS
PHY695	3-0-0-0-4		Course Contents: References/Text Books:	NONLINEAR SYSTEM & DYNAMICS
PHY695A	3-0-0-0-9		Course Contents: References/Text Books:	NONLINEAR SYSTEM & DYNAMICS
PHY697A	0-0-20-0-12		Course Contents: References/Text Books:	M SC RESEARCH PROJECT -I
PHY697B	0-0-20-0-12		Course Contents: References/Text Books:	M SC RESEARCH PROJECT-II
PSO201A	2-1-0-0-8		Course Contents: References/Text Books:	QUANTUM PHYSICS