JAYAMUKHI INSTITUTE OF TECHNOLOGICAL SCIENCES
(An Autonomous Institution)

List of New Courses for the Academic Year 2017-18

S.NO	Name of the program	Number of Courses
	Civil Engineering	
1	➢ Strength of Materials-I ➢ Fluid Mechanics ➢ Surveying ➢ Building Materials, Construction and Planning ➢ Environmental Studies ➢ Strength of Materials Lab ➢ Surveying La-I ➢ Computer Aided Drafting of Buildings Lab ➢ Strength of Materials-II ➢ Concrete Technology ➢ Hydraulics & Hydraulic Machinery ➢ Fluid Mechanics & Hydraulic Machinery Lab ➢ Surveying Lab-II ➢ Design of Reinforced Concrete Structures ➢ Structural Analysis-I ➢ Engineering Geology & Rock Mechanics ➢ Soil Mechanics ➢ Engineering Hydrology ➢ Pre Stressed Concrete ➢ Remote Sensing and GIS ➢ Engineering Geology Lab ➢ Concrete Technology Lab ➢ Irrigation Engineering and Hydraulic Structures ➢ Structural Analysis-II ➢ Design of Steel Structures ➢ Bridge Engineering ➢ Watershed Management ➢ Rehabilitation and Retrofitting of Structures ➢ Advanced Communication Skills Lab ➢ Soil Mechanics Lab ➢ Structural Engineering Detailing Lab ➢ Energy Studies ➢ Environmental Engineering ➢ Highway Engineering ➢ Foundation Engineering ➢ Advanced Analysis of Structures ➢ Elements of Earth Quake Engineering ➢ Estimation & Valuation ➢ Theory of Elasticity and Plasticity ➢ Traffic Engineering and Transportation Planning ➢ Environmental Engineering Lab ➢ Highway Engineering Lab ➢ Ground Improvement Techniques ➢ Railway and Airport Engineering	48

		➢ Finite Element Method	
		➢ Construction Planning and Project Management	
		➢ Industrial Waste Water Treatment	
		➢ Advanced Reinforced Concrete Structures	
2	**Electrical and Electronics Engineering**		
		➢ Electrical Circuits – I	
		➢ Basic Electronics Engineering	
		➢ Basic Electronics Lab	
		➢ Electromagnetic fields	
		➢ Electrical circuits-II	
		➢ Electrical Machines-I	
		➢ Electrical Circuits Lab	
		➢ Electrical Circuits Lab	
		➢ Power systems-I	
		➢ Electrical Machines-II	
		➢ Basic Electrical Simulation Lab	
		➢ Control Systems	
		➢ Power system-II	
		➢ Electrical Machines-III	
		➢ Power Electronics Renewable Energy Sources	
		➢ Energy Storage Systems	
		➢ Electrical Engineering Materials	
		➢ Control Systems Lab	
		➢ Electrical Machines-II Lab	
		➢ Switch Gear and Protection	
		➢ Power Semi conductor Drives	
		➢ Electrical & Electronics Instrumentation	
		➢ Utilization of Electrical Energy	
		➢ Power System Reliability	
		➢ Electrical Estimation and Costing	41
		➢ Power Electronics Lab	
		➢ Electrical Measurements Lab	
		➢ Power system Operation & control	
		➢ Computer Methods in Power Systems	
		➢ Design of Electrical Machines	
		➢ Modern Power Electronic Converters	
		➢ Electrical Distribution Systems	
		➢ High Voltage Engineering	
		➢ Digital Control Systems	
		➢ Simulation of Electrical Systems Lab	
		➢ Fundamentals of HVDC and FACTs Devices	
		➢ Extra high Voltage AC Transmission	
		➢ Power Quality	
		➢ Neural Networks and Fuzzy logic	
		➢ Linear Systems Analysis	
		➢ Advanced Control Systems	
3	**Mechanical Engineering**		
		➢ Engineering Mechanics-I	
		➢ Engineering Mechanics-II	
		➢ Engineering Graphics-I	
		➢ Engineering Graphics-II	

	➢ Engineering Workshop & IT Work Shop ➢ Thermodynamics ➢ Mechanics of solids ➢ Metallurgy and Materials Science ➢ Production Technology ➢ Metallurgy and Materials Science Lab ➢ Mechanics of Solids Lab ➢ Production Technology Lab ➢ Thermal Engineering-1 ➢ Mechanics of Fluids & Hydraulic Machines ➢ Mechanics of Fluids & Hydraulic Machines Lab ➢ Machine Drawing Practice Lab ➢ Thermal Engineering-II ➢ Kinematics of Machinery ➢ Machine Tools ➢ Refrigeration and Air Conditioning ➢ Renewable Energy Sources ➢ Mechatronics ➢ Thermal Engineering Lab ➢ Machine Tools Lab ➢ Heat transfer ➢ Dynamics Of Machinery ➢ Design of Machine Elements ➢ Finite Element Method ➢ Plant Layout & Material Handling ➢ Automation in Manufacturing ➢ Heat Transfer Lab ➢ Production Drawing Practice ➢ Product Design Lab ➢ Metrology and Instrumentation ➢ CAD/CAM ➢ Operation Research ➢ Reliability Engineering ➢ Modeling and Simulation of manufacturing systems ➢ Power Plant Engineering ➢ Advanced Strength of Materials ➢ Mechanics of Composite Materials ➢ Metrology and Instrumentation Lab ➢ CAD/CAM Lab ➢ Automobile Engineering ➢ Robotics ➢ Gas Dynamics ➢ Unconventional Machining Processes ➢ Computational Fluid Dynamics ➢ Production Planning and Control	50
	Electronics and Communication Engineering	
4	➢ Electrical Circuits ➢ Basic Electronics Engineering ➢ Basic Electronics Lab	

	- Switching Theory and Logic Design - Signals and Systems - Electronic circuit Analysis - Electronic Circuit Analysis Lab - Basic Simulation Lab - Probability Theory and Stochastic Process - Pulse and Digital Circuits - Analog Communications - Electromagnetic Waves and Transmission Lines - Pulse and Digital Circuits Lab - Analog Communication Lab - Digital Communications - Digital Design through HDL - Control Systems - IC Applications - Electronic Measurements & Instrumentation - Data Acquisition System - Digital Television Engineering - IC & HDL Simulation Lab - Digital Communications Lab - Microprocessors and Microcontrollers - Digital Signal Processing - Antennas and Wave Propagation - VLSI Technology - Telecommunication Switching Networks - Data Communication and Networking - Digital Signal Processing Lab - Microprocessors and Microcontrollers Lab - Embedded Systems - Microwave and Optical Communication Engineering - Digital Image Processing - Operating Systems - Low Power VLSI Design - Wireless Communication Networks - Satellite Communication - Real Time Operating systems - Embedded Systems Lab - Microwave and Optical communication Lab - Wireless Sensor Networks - Digital Signal Processors and Architectures - RF Circuit Design - Radar Systems and Navigational Aids - Mixed Signal Design - Multimedia and Signal coding	48	

	Computer Science and Engineering		
5	➢ Problem Solving and Computer programming ➢ Information Technology workshop ➢ Data Structures through C++ ➢ Data Structures through C++ Lab ➢ Mathematical Foundations of Computer Science ➢ Computer Organization ➢ Database Management Systems ➢ Java Programming ➢ Database Management Systems Lab ➢ Java Programming Lab ➢ Design and Analysis of Algorithms ➢ Formal Languages and Automata Theory ➢ Operating Systems ➢ Software Engineering ➢ Operating Systems Lab ➢ CASE Tools Lab ➢ Computer Networks ➢ Compiler Design ➢ Machine Learning ➢ Computer Forensics ➢ Advanced Databases ➢ Compiler Design & Computer Networks Lab ➢ Data Warehousing and Data Mining ➢ Web Programming ➢ Network Security ➢ High Performance Computing ➢ Design Patterns ➢ Software Project Management ➢ Data Warehousing and Data Mining Lab ➢ Web Programming Lab ➢ Visual Programming Lab ➢ Network Programming ➢ Mobile Application Development ➢ Software Testing Methodologies ➢ Computer Graphics and Multimedia ➢ Digital Image Processing ➢ Embedded Systems ➢ Information Retrieval Systems ➢ Secure Software Engineering ➢ Network Programming Lab ➢ Mobile Application Development Lab ➢ E-Commerce ➢ Semantic Web and Social Networks ➢ Web Services ➢ Human Computer Interaction ➢ Big-Data Management ➢ Soft Computing	48	
	M.Tech Computer science and Engineering		
	➢ Data Structures and Algorithms		

	- Database Internals - Distributed Systems - Network Security - Android Application Development - Cloud Computing - Internet of Things - Machine Learning - Parallel and Distributed Algorithms - Software Architecture and Design Patterns - Embedded Systems - Data Structures and Algorithms Lab - Network Programming - Information Retrieval Systems - Internet Technologies and Services - Data Mining - Storage Area Networks - Semantic Web and Social Networks - Cyber Security - Big Data Analytics - Soft Computing - Software Process and Project Management - Distributed Computing - Internet Technologies and Services Lab	24
	M.Tech(Embedded Systems)	
	- Embedded System Design - ARM Architectures - Real Time Operating Systems - Advanced Computer Architectures - Embedded C - Design for Testability - Research Methodology - Digital Signal Processing Architectures and Algorithms - Embedded Networking - Sensors and Actuators - CPLD and FPGA Architectures - Hardware and software Co design - Intellectual Property Rights(IPR)	13

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Jayamukhi Institute of Technological Sciences
Narsampet, Warangal-506332.

MASTER OF BUSINESS ADMINISTRATION (MBA) R15

COURSE STRUCTURE AND SYLLABUS

I Year – I Semester

Code	Course Title	Int. marks	Ext. marks	L	P	C
AJBM01	PRINCIPLES OF MANAGEMENT AND ORGANISATIONAL BEHAVIOUR	40	60	3	-	3
AJBM02	BUSINESS LAWS & ENVIRONMENT	40	60	3	-	3
AJBM03	MANAGERIAL ECONOMICS	40	60	3	-	3
AJBM04	FINANCIAL ACCOUNTING & ANALYSIS	40	60	3	-	3
AJBM05	STATISTICS FOR MANAGEMENT	40	60	3	-	3
AJBM06	E – COMMERCE CROSS CULTURE MANAGEMENT WTO &IPR TOTAL QUALITY MANAGENT PROJECT MANAGEMNT	40	60	3	-	3
AJBM52	STATISTICAL DATA ANALYSIS - LAB	50	-	-	4	2
AJBM53	BUSINESS COMMUNICATION- SEMINAR	50	-	-	4	2
	Total Credits			**18**	**8**	**22**

I Year - II Semester

Code	Course Title	Int. marks	Ext. marks	L	P	C
AJBM07	HUMAN RESOURCE MANAGEMENT	40	60	3	-	3
AJBM08	MARKETING MANAGEMENT	40	60	3	-	3
AJBM09	FINANCIAL MANAGEMENT	40	60	3	-	3
AJBM10	QUANTITATIVE ANALYSIS FOR BUSINESS DECISIONS	40	60	3	-	3
AJBM11	ERP	40	60	3	-	3
AJBM12	☐ FOREIGN TRADE ☐ BANKING,INSURANCE & RISK MANAGEMENT ☐ LOGISTICS & SUPPLY CHAIN MANAGEMENT ☐ MSME MANAGEMENT	40	60	3	-	3
AJBM54	ANNUAL REPORT ANALYSIS - LAB	50	-	-	4	2
AJBM55	SUMMER INTERNSHIP - SEMINAR	50	-	-	4	2
	Total Credits			**18**	**8**	**22**

II Year – I Semester

Code	Course Title	Int. marks	Ext. marks	L	P	C
AJBM13	OPERATIONS MANAGEMENT	40	60	3	-	3
AJBM14	STRATEGIC MANAGEMENT	40	60	3	-	3
AJBM15	RESEARCH METHDOLOGY	40	60	3	-	3
Core Elective I	(MRKG/HRM/FIN/SYS)	40	60	3	-	3
Core Elective II	(MRKG/HRM/FIN/SYS)	40	60	3	-	3
Core Elective III	(MRKG/HRM/FIN/SYS)	40	60	3	-	3
AJBM56	PERSONAL EFFECTIVENESS - SEMINAR	50	-	-	4	2
AJBM57	BUSINESS BEST PRACTICES AND SUCCESS STORIES OF EMERGING LEADERS - SEMINAR	50	-	-	4	2
	Total Credits			**18**	**8**	**22**

CORE ELECTIVE STREAMS (choose any one stream subjects as Core Electives)

MARKETING ELECTIVES	
AJBMEM18	CONSUMER BEHAVIOUR
AJBMEM19	SALES AND DISTRIBUTION
AJBMEM20	INTEGRATED MARKETING COMMUNICATIONS
AJBMEM21	RETAILING MANAGEMENT
AJBMEM22	SERVICES MARKETING
AJBMEM23	INTERNATIONAL MARKETING

FINANCE ELECTIVES	
AJBMEF26	STRATEGIC MANAGEMENT ACCOUNTING
AJBMEF27	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT
AJBMEF28	FINANCIAL INSTITUTIONS, MARKETS & SERVICES
AJBMEF29	STRATEGIC INVESTMENT AND FINANCING DECISIONS
AJBMEF30	INTERNATIONAL FINANCIAL MANAGEMENT
AJBMEF31	FINANCIAL DERIVATIVES
HR ELECTIVES	
AJBMEH35	PERFORMANCE MANAGEMENT

II Year - II Semester

Code	Course Title	Int. marks	Ext. marks	L	P	C
AJBM16	**ENTREPRENUERSHIP**	40	60	3	-	3
AJBM17	**TECHNOLOGY MANAGEMENT**	40	60	3	-	3
Core Elective IV	**(MRKG/HRM/FIN/SYS)**	40	60	3	-	3
Core Elective V	**(MRKG/HRM/FIN/SYS)**	40	60	3	-	3
Core Elective VI	**(MRKG/HRM/FIN/SYS)**	40	60	3	-	3
AJBM58	**PRE SUBMISSION OF PROJECT –SEMINAR**	50	-	-	4	2
AJBM59	**COMPREHENSIVE VIVA**	-	100	-	4	2
AJBM60	**PROJECT**	40	60	-		3
	Total Credits			15	8	22

AJBMEH36	TRAINING AND DEVELOPMENT
AJBMEH37	MANAGEMENT OF INDUSTRIAL RELATIONS
AJBMEH38	COMPENSATION & REWARD MANAGEMENT
AJBMEH39	INTERNATIONAL HUMAN RESOURCE MANAGEMENT
AJBMEH40	LEADERSHIP & CHANGE MANAGEMENT
AJBMEH41	

SYSTEMS ELECTIVES	
AJBMES44	BUSINESS INTELLIGENCE
AJBMES45	DATABASE MANAGEMENT SYSTEMS
AJBMES46	DECISION SUPPORT SYSTEMS
AJBMES47	E-BUSINESS
AJBMES48	KNOWLEDGE MANAGEMENT
AJBMES49	INFORMATION SYSTEMS, CONTROL

Legend: A – Autonomy   J – Jayamukhi   BM- Business Management

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