

**JAYAMUKHI INSTITUTE OF TECHNOLOGICAL SCIENCES**  
(An Autonomous Institution)

**List of New Courses for the Academic Year 2016-17**

S.NO	Name of the program	Number of Courses
1	<b>Civil Engineering</b> <ul style="list-style-type: none"> <li>➤ Strength of Materials-I</li> <li>➤ Fluid Mechanics</li> <li>➤ Surveying</li> <li>➤ Building Materials, Construction and Planning</li> <li>➤ Environmental Studies</li> <li>➤ Strength of Materials Lab</li> <li>➤ Surveying La-I</li> <li>➤ Computer Aided Drafting of Buildings Lab</li> <li>➤ Strength of Materials-II</li> <li>➤ Concrete Technology</li> <li>➤ Hydraulics &amp; Hydraulic Machinery</li> <li>➤ Fluid Mechanics &amp; Hydraulic Machinery Lab</li> <li>➤ Surveying Lab-II</li> <li>➤ Design of Reinforced Concrete Structures</li> <li>➤ Structural Analysis-I</li> <li>➤ Engineering Geology &amp; Rock Mechanics</li> <li>➤ Soil Mechanics</li> <li>➤ Engineering Hydrology</li> <li>➤ Pre Stressed Concrete</li> <li>➤ Remote Sensing and GIS</li> <li>➤ Engineering Geology Lab</li> <li>➤ Concrete Technology Lab</li> <li>➤ Irrigation Engineering and Hydraulic Structures</li> <li>➤ Structural Analysis-II</li> <li>➤ Design of Steel Structures</li> <li>➤ Bridge Engineering</li> <li>➤ Watershed Management</li> <li>➤ Rehabilitation and Retrofitting of Structures</li> <li>➤ Advanced Communication Skills Lab</li> <li>➤ Soil Mechanics Lab</li> <li>➤ Structural Engineering Detailing Lab</li> <li>➤ Energy Studies</li> <li>➤ Environmental Engineering</li> <li>➤ Highway Engineering</li> <li>➤ Foundation Engineering</li> <li>➤ Advanced Analysis of Structures</li> <li>➤ Elements of Earth Quake Engineering</li> <li>➤ Estimation &amp; Valuation</li> <li>➤ Theory of Elasticity and Plasticity</li> <li>➤ Traffic Engineering and Transportation Planning</li> <li>➤ Environmental Engineering Lab</li> <li>➤ Highway Engineering Lab</li> <li>➤ Ground Improvement Techniques</li> <li>➤ Railway and Airport Engineering</li> </ul>	48

	<ul style="list-style-type: none"> <li>➤ Finite Element Method</li> <li>➤ Construction Planning and Project Management</li> <li>➤ Industrial Waste Water Treatment</li> <li>➤ Advanced Reinforced Concrete Structures</li> </ul>	
2	<p><b>Electrical and Electronics Engineering</b></p> <ul style="list-style-type: none"> <li>➤ Electrical Circuits – I</li> <li>➤ Basic Electronics Engineering</li> <li>➤ Basic Electronics Lab</li> <li>➤ Electromagnetic fields</li> <li>➤ Electrical circuits-II</li> <li>➤ Electrical Machines-I</li> <li>➤ Electrical Circuits Lab</li> <li>➤ Electrical Circuits Lab</li> <li>➤ Power systems-I</li> <li>➤ Electrical Machines-II</li> <li>➤ Basic Electrical Simulation Lab</li> <li>➤ Control Systems</li> <li>➤ Power system-II</li> <li>➤ Electrical Machines-III</li> <li>➤ Power Electronics Renewable Energy Sources</li> <li>➤ Energy Storage Systems</li> <li>➤ Electrical Engineering Materials</li> <li>➤ Control Systems Lab</li> <li>➤ Electrical Machines-II Lab</li> <li>➤ Switch Gear and Protection</li> <li>➤ Power Semi conductor Drives</li> <li>➤ Electrical &amp; Electronics Instrumentation</li> <li>➤ Utilization of Electrical Energy</li> <li>➤ Power System Reliability</li> <li>➤ Electrical Estimation and Costing</li> <li>➤ Power Electronics Lab</li> <li>➤ Electrical Measurements Lab</li> <li>➤ Power system Operation &amp; control</li> <li>➤ Computer Methods in Power Systems</li> <li>➤ Design of Electrical Machines</li> <li>➤ Modern Power Electronic Converters</li> <li>➤ Electrical Distribution Systems</li> <li>➤ High Voltage Engineering</li> <li>➤ Digital Control Systems</li> <li>➤ Simulation of Electrical Systems Lab</li> <li>➤ Fundamentals of HVDC and FACTs Devices</li> <li>➤ Extra high Voltage AC Transmission</li> <li>➤ Power Quality</li> <li>➤ Neural Networks and Fuzzy logic</li> <li>➤ Linear Systems Analysis</li> <li>➤ Advanced Control Systems</li> </ul>	41
	<p><b>Mechanical Engineering</b></p> <ul style="list-style-type: none"> <li>➤ Engineering Mechanics-I</li> <li>➤ Engineering Mechanics-II</li> <li>➤ Engineering Graphics-I</li> <li>➤ Engineering Graphics-II</li> </ul>	
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	<ul style="list-style-type: none"> <li>➤ Engineering Workshop &amp; IT Work Shop</li> <li>➤ Thermodynamics</li> <li>➤ Mechanics of solids</li> <li>➤ Metallurgy and Materials Science</li> <li>➤ Production Technology</li> <li>➤ Metallurgy and Materials Science Lab</li> <li>➤ Mechanics of Solids Lab</li> <li>➤ Production Technology Lab</li> <li>➤ Thermal Engineering-1</li> <li>➤ Mechanics of Fluids &amp; Hydraulic Machines</li> <li>➤ Mechanics of Fluids &amp; Hydraulic Machines Lab</li> <li>➤ Machine Drawing Practice Lab</li> <li>➤ Thermal Engineering-II</li> <li>➤ Kinematics of Machinery</li> <li>➤ Machine Tools</li> <li>➤ Refrigeration and Air Conditioning</li> <li>➤ Renewable Energy Sources</li> <li>➤ Mechatronics</li> <li>➤ Thermal Engineering Lab</li> <li>➤ Machine Tools Lab</li> <li>➤ Heat transfer</li> <li>➤ Dynamics Of Machinery</li> <li>➤ Design of Machine Elements</li> <li>➤ Finite Element Method</li> <li>➤ Plant Layout &amp; Material Handling</li> <li>➤ Automation in Manufacturing</li> <li>➤ Heat Transfer Lab</li> <li>➤ Production Drawing Practice</li> <li>➤ Product Design Lab</li> <li>➤ Metrology and Instrumentation</li> <li>➤ CAD/CAM</li> <li>➤ Operation Research</li> <li>➤ Reliability Engineering</li> <li>➤ Modeling and Simulation of manufacturing systems</li> <li>➤ Power Plant Engineering</li> <li>➤ Advanced Strength of Materials</li> <li>➤ Mechanics of Composite Materials</li> <li>➤ Metrology and Instrumentation Lab</li> <li>➤ CAD/CAM Lab</li> <li>➤ Automobile Engineering</li> <li>➤ Robotics</li> <li>➤ Gas Dynamics</li> <li>➤ Unconventional Machining Processes</li> <li>➤ Computational Fluid Dynamics</li> <li>➤ Production Planning and Control</li> </ul>	50
4	<b>Electronics and Communication Engineering</b>	

- 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

	<b>Computer Science and Engineering</b>	
5	<ul style="list-style-type: none"> <li>➤ Problem Solving and Computer programming</li> <li>➤ Information Technology workshop</li> <li>➤ Data Structures through C++</li> <li>➤ Data Structures through C++ Lab</li> <li>➤ Mathematical Foundations of Computer Science</li> <li>➤ Computer Organization</li> <li>➤ Database Management Systems</li> <li>➤ Java Programming</li> <li>➤ Database Management Systems Lab</li> <li>➤ Java Programming Lab</li> <li>➤ Design and Analysis of Algorithms</li> <li>➤ Formal Languages and Automata Theory</li> <li>➤ Operating Systems</li> <li>➤ Software Engineering</li> <li>➤ Operating Systems Lab</li> <li>➤ CASE Tools Lab</li> <li>➤ Computer Networks</li> <li>➤ Compiler Design</li> <li>➤ Machine Learning</li> <li>➤ Computer Forensics</li> <li>➤ Advanced Databases</li> <li>➤ Compiler Design &amp; Computer Networks Lab</li> <li>➤ Data Warehousing and Data Mining</li> <li>➤ Web Programming</li> <li>➤ Network Security</li> <li>➤ High Performance Computing</li> <li>➤ Design Patterns</li> <li>➤ Software Project Management</li> <li>➤ Data Warehousing and Data Mining Lab</li> <li>➤ Web Programming Lab</li> <li>➤ Visual Programming Lab</li> <li>➤ Network Programming</li> <li>➤ Mobile Application Development</li> <li>➤ Software Testing Methodologies</li> <li>➤ Computer Graphics and Multimedia</li> <li>➤ Digital Image Processing</li> <li>➤ Embedded Systems</li> <li>➤ Information Retrieval Systems</li> <li>➤ Secure Software Engineering</li> <li>➤ Network Programming Lab</li> <li>➤ Mobile Application Development Lab</li> <li>➤ E-Commerce</li> </ul>	48

	<ul style="list-style-type: none"> <li>➤ Semantic Web and Social Networks</li> <li>➤ Web Services</li> <li>➤ Human Computer Interaction</li> <li>➤ Big-Data Management</li> <li>➤ Soft Computing</li> </ul>	
	<b>M.Tech Computer science and Engineering</b>	
	<ul style="list-style-type: none"> <li>➤ Data Structures and Algorithms</li> <li>➤ Database Internals</li> <li>➤ Distributed Systems</li> <li>➤ Network Security</li> <li>➤ Android Application Development</li> <li>➤ Cloud Computing</li> <li>➤ Internet of Things</li> <li>➤ Machine Learning</li> <li>➤ Parallel and Distributed Algorithms</li> <li>➤ Software Architecture and Design Patterns</li> <li>➤ Embedded Systems</li> <li>➤ Data Structures and Algorithms Lab</li> <li>➤ Network Programming</li> <li>➤ Information Retrieval Systems</li> <li>➤ Internet Technologies and Services</li> <li>➤ Data Mining</li> <li>➤ Storage Area Networks</li> <li>➤ Semantic Web and Social Networks</li> <li>➤ Cyber Security</li> <li>➤ Big Data Analytics</li> <li>➤ Soft Computing</li> <li>➤ Software Process and Project Management</li> <li>➤ Distributed Computing</li> <li>➤ Internet Technologies and Services Lab</li> </ul>	24
	<b>M.Tech(Embedded Systems)</b>	
	<ul style="list-style-type: none"> <li>➤ Embedded System Design</li> <li>➤ ARM Architectures</li> <li>➤ Real Time Operating Systems</li> <li>➤ Advanced Computer Architectures</li> <li>➤ Embedded C</li> <li>➤ Design for Testability</li> <li>➤ Research Methodology</li> <li>➤ Digital Signal Processing Architectures and Algorithms</li> <li>➤ Embedded Networking</li> <li>➤ Sensors and Actuators</li> <li>➤ CPLD and FPGA Architectures</li> <li>➤ Hardware and software Co design</li> <li>➤ Intellectual Property Rights(IPR)</li> </ul>	13

  
**Principal**  
 Jayamukhi Institute of Technological Sciences  
 Narsampet, Warangal-506333.

**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
<b>Total Credits</b>				<b>18</b>	<b>8</b>	<b>22</b>

**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	<input type="checkbox"/> FOREIGN TRADE <input type="checkbox"/> BANKING,INSURANCE & RISKMANAGEMENT <input type="checkbox"/> LOGISTICS & SUPPLY CHAIN MANAGEMENT <input type="checkbox"/> MSME MANAGEMENT	40	60	3	-	3
AJBM54	ANNUAL REPORT ANALYSIS - LAB	50	-	-	4	2
AJBM55	SUMMER INTERNSHIP - SEMINAR	50	-	-	4	2
<b>Total Credits</b>				<b>18</b>	<b>8</b>	<b>22</b>

**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
<b>Total Credits</b>				<b>18</b>	<b>8</b>	<b>22</b>

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

<b>MARKETING ELECTIVES</b>	
AJBMEM18	CONSUMER BEHAVIOUR
AJBMEM19	SALES AND DISTRIBUTION
AJBMEM20	INTEGRATED MARKETING COMMUNICATIONS
AJBMEM21	RETAILING MANAGEMENT
AJBMEM22	SERVICES MARKETING
AJBMEM23	INTERNATIONAL MARKETING
<b>FINANCE ELECTIVES</b>	
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
<b>HR ELECTIVES</b>	
AJBMEH35	PERFORMANCE MANAGEMENT
AJBMEH36	TRAINING AND DEVELOPMENT

**II Year - II Semester**

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

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

<b>SYSTEMS ELECTIVES</b>	
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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