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| **Programme Code** | **Programme name** | **Major Changes in Syllabus in Past 5-years** |
| 101 | Bachelor of Technology (Computer Science and Engineering) | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  Realizing the importance of industry exposure, Industrial Training is introduced in third semester. In order to expose the students to different areas apart from core and elective courses, generic open electives have also been offered. For skill enhancement and to implement interdisciplinary aspect, open elective courses - Material Science and Engineering, Numerical Methods, Analog and Digital Electronics, Engineering Measurement and Metrology are introduced in the curriculum.  To teach students effective and coordinated response to disasters, new course on Disaster Management is introduced in Semester-4. Under open electives categories in Semester-4, the courses on Nano Structures & Materials in Engineering, Optical Engineering, Optimization Techniques, Operations Management, and Elements of Information Theory are introduced.  New Course on Modelling and Simulation is introduced in fifth semester. Professional Ethics and Human Values, Industrial Training/Internship and Generic Open Elective-II also added. Department electives I is also introduced where a new course on Human Computer Interaction is available for choice.  Few New Course like Wireless Networks, Microprocessor and Interfacing and Multimedia Technologies are introduced in Sixth Semester. From the Management Elective, Principles of Management, Marketing Management, Financial Management & Human Resource Management are also introduced in 6th semester. As part of Department electives II, a new subject - Internet of Things is introduced.  New Course of Machine Learning and Industrial Training/Internship are introduced in Seventh Semester. As part of Department electives 3 & 4, new subjects – Evolutionary computing, Knowledge Engineering, Information Retrieval and E-commerce are introduced.  New department electives like Quantum Computing, Parallel Programming, Computational Optimization are introduced in eighth semester. |
| 103 | Bachelor of Technology (Information Technology) | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  Realizing the importance of industry exposure, Industrial Training is introduced in third semester. In order to expose the students to different areas apart from core and elective courses, generic open electives have also been offered. For skill enhancement and to implement interdisciplinary aspect, open elective courses - Material Science and Engineering, Numerical Methods, Analog and Digital Electronics, Engineering Measurement and Metrology are introduced in the curriculum.  To teach students effective and coordinated response to disasters, new course on Disaster Management is introduced in Semester-4. Under open electives categories in Semester-4, the courses on Nano Structures & Materials in Engineering, Optical Engineering, Optimization Techniques, Operations Management, and Elements of Information Theory are introduced.  New Course on Artificial Intelligence, Modelling and Simulation, Industrial Training/Internship are introduced in 5th semester.  Wireless Networks, Data Mining and Machine Learning, Advanced Data Structure and Algorithm, Internet of Things, Advanced Database Management Systems, Computer Graphics, Principles of Management, Marketing Management, Financial Management, Human Resource Management, Enterprise Java Programming, Compiler Design, Computer Vision, Swarm and Evolutionary Optimization are introduced in 6th Semester and 7th Semester. |
| 102 | Bachelor of Technology (Electronics and Communication Engineering) | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  Realizing the importance of industry exposure, Industrial Training is introduced in third semester. In order to expose the students to different areas apart from core and elective courses, generic open electives have also been offered. For skill enhancement and to implement interdisciplinary aspect, open elective courses – Data Structures, Database Management Systems, Material Science and Engineering, Numerical Methods, Engineering Measurement and Metrology are introduced in the curriculum.  To teach students effective and coordinated response to disasters, new course on Disaster Management is introduced in Semester-4. Under open electives categories, Object Oriented Programming, Operations Management, Nano Structures & Materials in Engineering, Optical Engineering, Optimization Techniques are introduced in the 4th semester. Syllabus of Linear Integrated Circuits, Digital System Design, Electromagnetic Field Theory, Computer Organization and Architecture are revised.  In Fifth Semester, syllabus of Digital Communication Systems, Modelling and Simulation, Control Systems, Data Communication and Computer Networks, Electronics Measurement & Instrumentation, Artificial Intelligence, Random Signals & Processes and Advanced Computer Architecture are revised as per the industry needs.  Microprocessors & Microcontrollers, Internet of Things, Antenna Design, FPGA & Verification, Power Electronics, Cloud Computing are modified in 6th Semester. Under Management elective, Principles of Management, Marketing Management, Financial Management, Human Resource Management are introduced.  In Seventh Semester, under Departmental electives, Introduction to Robotics, Big Data Analytics, Digital Image Processing, Machine Learning Introduction to Smart Grid, Analog VLSI, Radar Engineering, Cyber Security and Forensics are introduced.  Bio-medical Electronics and Imaging, Optical Communication & Networks, Satellite Communication, Information Retrieval, Artificial Neural Networks and Deep Learning, Non-Conventional Energy Resources, Data Analytics with Python Applied Optimization for Wireless, Machine Learning, Big Data Cryptography and Network Security are added in Department Elective category of 8th semester. |
| 104 | Bachelor of Technology (Mechanical and Automation Engineering) | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  Realizing the importance of industry exposure, Industrial Training is introduced in third semester. In order to expose the students to different areas apart from core and elective courses, generic open electives have also been offered. For skill enhancement and to implement interdisciplinary aspect, open elective courses – Data Structures, Database Management Systems, Material Science and Engineering, Numerical Methods, Engineering Measurement and Metrology are introduced in the curriculum. New Courses of Production technology –I, Thermal Engineering - I, Numerical Techniques for Engineers, Machine Drawing Lab, Industrial Training are introduced.  New courses on Production technology - II, Engineering Materials, Thermal Engineering-II, Computer Organization & Architecture are introduced in 4th semester. Under Open Elective Category, new courses on Object Oriented Programming, Elements of Information Theory, Nano Structures & Materials in Engineering, Optical Engineering, and Optimization Techniques are introduced in fourth semester.  New Courses/syllabus revision is done for Fluid Mechanics and Hydraulic Machines, Automobile Engineering, Mechanical Vibration, Introduction to composites, Automation in Manufacturing, IC Engines, Artificial Intelligence and Industrial Training are introduced in fifth semester.  Under the Management Elective category, new Courses of Principles of Management, Marketing Management, Financial Management are introduced. Syllabus of Metal Forming & Casting, Advanced Strength of Materials, Quality Management & Six Sigma Applications, Design of Mechanisms are revised.  New Courses/revision of Industrial Tribology, Power Electronics, Power Plant Engineering, and Combustion, Emission and Pollution Control are introduced/done in seventh semester.  New Courses/revision of Computer Aided Manufacturing, Tool Engineering, Welding Technology, Mechanical Modelling and Simulation, Flexible Manufacturing System, Refrigeration and Air-Conditioning, and E-Learning Based Course-1 are introduced/done in eighth semester. |
| 614 | Bachelors of Architecture | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  Realizing the importance of industry exposure, Industrial Training is introduced in third semester. In order to expose the students to different areas apart from core and elective courses, generic open electives have also been offered. For skill enhancement, open elective courses are introduced.  New course are introduced under CBCS which include Introduction to Architectural Design – I, Architectural Drawing – I, Architectural Graphics – I, History of Architecture- I, Structures – I, Climatology and Environmental Studies I, Architectural Workshop – I, Mathematics in Architecture.  Architectural Drawing – II, Architectural Graphics -II, History of Architecture- II, Structures – II, Climatology and Environmental Studies -II, Introduction to Computers & Programming in C Language, Art & Design Appreciation, Art in Architecture, Graphic and Product Design respectively. |
| 409 | Master of Technology-Information Technology | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  In order to expose students to different areas apart from core course subject, generic open electives have also been offered.  New Courses of Advanced Programming, Fundamentals of Information Security, Research Methodology along with elective courses are introduced in Semester-1.  New Courses of Advances in Machine Learning, Applied Cryptography and Research Ethics along with elective courses are introduced in Semester-2.  New Course of Ethical Hacking along with elective courses are introduced in Semester-3. Practical Training / summer Internship is also introduced in third semester in CBCS mode. For motivating the students to pursue quality research, a Research Track is introduced for pursuing final semester project where students are expected to produce quality research paper as an outcome of the research.  The Department Electives for first semester are Advanced Database Management Systems, Introduction to Biometrics, Computer Vision and Blockchain Fundamentals.  The Department Electives for second semester are Soft Computing, Semantic Web, Security Testing and Risk Management and Natural Language Processing and Information Retrieval.  The Department Electives for third semester are Neural Network and Deep Learning, Security Patterns, Cryptographic Protocols and Algorithms, Advanced Network Technology.  The Department Electives for fourth semester are Cyber Laws and Rights, Security and Privacy in Social Networks, Software Defined Networks and Cloud Computing Architecture and Security. |
| 210 | Master of Technology (CSE)- AI | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  In order to expose students to different areas apart from core course subject, generic open electives have also been offered.  In First semester, new courses are introduced in CBCS system such as: Problem Solving through AI, Soft Computing, Intelligent Data and Information Retrieval, Data structures and Algorithm Analysis, Generic Open Electives, Research Methodology.  In second Semester of M.Tech (CS-AI), new courses introduced are: Advances in Machine Learning, IOT and its applications in AI, Probability and Random Processes, Research Ethics. New departmental electives are also introduced.  In third semester, CBCS system new courses introduced are: Neural Network and Deep Learning along with departmental electives. Practical Training / summer Internship is also introduced in third semester in CBCS mode. The Department Electives are Digital Image Processing, Natural Language Processing, Mobile Application Development, Human Computer Interaction, Speech Processing and Speech Recognition, Real Time Systems, Agent Based Intelligent Systems, Robotics and Applications, Wireless Sensor Networks.  For motivating the students to pursue quality research, a Research Track is introduced for pursuing final semester project where students are expected to produce quality research paper as an outcome of the research. |
| 212 | Master of Technology- VLSI Design | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  In order to expose students to different areas apart from core course subject, generic open electives have also been offered.  Department electives introduced in third semester are Low Power VLSI Design, VLSI Design Verification and Test, Advance Image Processing, Neural Networks in Embedded Applications, Nature Inspired VLSI Circuits, VLSI Interconnects, VLSI design Algorithms, VLSI Design Techniques for Analog IC, Artificial Intelligence and Data Structures.  In third semester Industrial Training / Internship also introduced. Practical Training / summer Internship is also introduced in third semester in CBCS mode. For motivating the students to pursue quality research, a Research Track is introduced for pursuing final semester project where students are expected to produce quality research paper as an outcome of the research. |
| 208 | Master of Technology (Robotics and Automation) | University adopted Choice Based Credit System (CBCS) in the year 2019 to refine the curriculum for keeping in pace with globalization. Aim was to provide a multi-disciplinary curriculum that gives a holistic experience to the students by having flexibility to choose subjects of their interest from their own streams and other streams in the University. CBCS also gives students flexibility to learn from MOOC courses offered by NPTEL, SWAYAM, other reputed Universities/Research Institutes/Industries. CBCS also give opportunity to the students to undertake internship after the completion of every academic year.  In order to expose students to different areas apart from core course subject, generic open electives have also been offered.  Department electives introduced in third semester are Machine Vision, Wireless Sensor Networks, Advanced Mechanism Design, Applications of Machine learning in Automation, Design of Experiments, Electrical machines and Power systems, Industrial Engineering, Embedded System Design for Automation, Bio Sensors, Multi-Body Dynamics and VLSI Design for Automation.  In third semester Industrial Training / Internship and Generic Open Elective also introduced. For motivating the students to pursue quality research, a Research Track is introduced for pursuing final semester project where students are expected to produce quality research paper as an outcome of the research. |
| 814 | Master of Planning - Urban Planning | Introduced in 2019 |
| 713 | Bachelor of Business Administration | Introduced in 2020 |
| 915 | Master of Business Administration | Introduced in 2020 |
| 117 | Bachelor of Technology – Computer Science and Engineering (AI) | Introduced in 2020 |
| 409 | Master of Computer Applications | As per AICTE and UGC notification, MCA 3 year programme scheme has been changed to MCA 2 year programme scheme.  Major changes are as follows:  In Semester 1 new courses introduced are: Programming with Python, Soft Skills, IT workshop-I along with two bridge courses: Programming in C language and Discrete structures. These bridge courses are non-credit courses which students can opt for enhancing their skills.  In Semester 2 new courses introduced are: Object Oriented Programming using Java, Machine learning, IT Workshop –II. Generic Open Electives are also introduced in semester II.  Semester 3, new courses introduced are: Big Data with NoSQL, Financial Reporting and Analysis. Ne set of electives based upon cyber security, IOT techniques and cloud computing also introduced in semester III.  Semester 4: Disaster Management, Generic Open Electives are newly introduced. |
| 1016 | Dual Degree B.Tech-MAE + MBA | Introduced in 2020. This is a dual degree program leading to BTech – MAE and MBA degrees after the completion of six year. The program gives an option to the students to exit the program after 4 years by getting BTech – MAE degree. |