

Capital Goods

B. Voc. in Mechatronics Technology

Course Introduction

A unique B. Voc. in Mechatronics Technology is a multi-disciplinary study dealing with the integration of mechanical devices, actuators, sensors, electronics, intelligent controllers and computers. Many new generations of consumer or commercial products can be classified as mechatronic products as they involve mechanical as well as electronic components. The need for mechatronic education has grown due to the increase in the number and importance of such systems and devices.

Eligibility for Admission

The eligibility for admission to B. Voc. in Mechatronics Technology shall be 10+2 or equivalent, in any stream.

Career Prospects/Job Role

The profession of mechatronics includes technicians and engineers. They design and maintain automated equipment. *Technicians and Engineers working in Laboratories, Offices or on-site Manufacturing Plants.*

Semester-wise Listing of Courses

SEMESTER I		
Subject Code	Subject Name	Credits
GE 1.1	Functional English	4
GE 1.2	Communication Skills - I	4
GE 1.3	Computing Skills - I	4
MT 1	Engineering Graphics	2
MT 2	Basic Electrical and Electronics Engineering	2
MT 3	Manufacturing Technology	2
MTP 1	Vocational Practical	12

SEMESTER II		
Subject Code	Subject Name	Credits
GE 2.1	Basics of Economics and Markets	4
GE 2.2	Environment Sciences	4
GE 2.3	Ethics and Governance	4
MT 4	Electronics and Instrumentation	2
MT 5	CNC Machines and Programming	2
MT 6	Engineering Metrology and Measurements	2
MTP 2	Vocational Practical	12

SEMESTER III		
Subject Code	Subject Name	Credits
GE 3.1	Communication Skills - II	4
GE 3.2	Financial Literacy	4
GE 3.3	Basics of Legal and HR Policies	4
MT 7	Smart Manufacturing and Artificial Intelligence	2
MT 8	Fundamentals of Mechatronics System	2
MT 9	Total Quality Management	2
MTP 3	Vocational Practical	12

SEMESTER IV		
Subject Code	Subject Name	Credits
GE 4.1	Computing Skills - II	2
GE 4.2	Basics of Accounting	4
GE 4.3	Design Thinking	4
GE 4.4	Organizational Behaviour	2
MT 10	Digital Electronics	2
MT 11	Electrical Machines and Drives	2
MT 12	Manufacturing Automation	2
MTP 4	Vocational Practical	12

SEMESTER V		
Subject Code	Subject Name	Credits
GE 5.1	Digital Literacy	4
GE 5.2	Health and Wellness	4
GE 5.3	Personal Grooming	4
MT 13	Microprocessors and Applications	2
MT 14	Design of Mechatronics System	2
MT 15	Micro Electro Mechanical Systems	2
MTP 5	Vocational Practical	12

SEMESTER VI		
Subject Code	Subject Name	Credits
GE 6.1	Entrepreneurship	4
GE 6.2	Employment Readiness	4
GE 6.3	Effective Workplace Skills & Competencies	4
MT 16	Robotics and Machine Vision System	2
MT 17	Micro Controller and PLC	2
MT 18	Industry 4.0	2
MTP 6	Vocational Practical	12

Programme fees: (Rs. 36,000/-per annum)

Examination fees: (Rs. 1,600/- per semester and Rs.3200 per annum)

Caution Deposit (Refundable): Rs.5000

Convocation Fees: Rs.2000/- (In absentia Rs.2500/-)

Campus Immersion Expenses: (Travel & Logistics for 7-10 days on Campus) are not part of the fee structure and the expenses will have to be met by the students followed by communication.