

# Capital Goods

## Introduction of the Sector

Manufacturing Industry has emerged as one of the growing sectors in India. The government of India had launched the 'Make in India' program to place India on the world map as a manufacturing hub and give global recognition to the Indian economy. India is expected to become the fifth largest manufacturing country in the world by the end of the year 2020. Also, it is expected to be the manufacturing destination of the world. This sector is said to generate an additional 100 million new jobs by 2022.

## 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

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	Subject Code	Subject Name	Credits
<b>I</b>	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	2
<b>II</b>	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	2
<b>III</b>	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	Engineering Mathematics	2
	MT 8	Fundamentals of Mechatronics System	2
	MT 9	Total Quality Management	2
	MTP 3	Vocational Practical	2
	<b>IV</b>	GE 4.1	Computing Skills – II
GE 4.2		Basics of Accounting	4
GE 4.3		Design Thinking	4
MT 10		Digital Electronics	2
MT 11		Electrical Machines and Drives	2
MT 12		Manufacturing Automation	2
MTP 4		Vocational Practical	2
<b>V</b>	GE 5.1	Digital Literacy	4
	GE 5.2	Health and Wellness	4
	GE 5.3	Personal Grooming	4
	GE 10.1	Basics of Economics and Markets	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	2
<b>VI</b>	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	2

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

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

**Caution Deposit ( Refundable):** Rs.5000