

Introduction of the Sector

The pharmaceutical industry in India ranks 3rd in the world in terms of volume and 14th in terms of value, the Indian pharmaceutical market has a growth of 10 percent year by year.

India contributes the second-largest share of the pharmaceutical workforce in the world. It has 3000 drug companies and about 10, 500 manufacturing units.

With the expected growth rate of 14% per annum, the Indian Pharmaceutical sector is expected to create more jobs in India in the future. The 'Pharma Vision 2020' by the government's Department of Pharmaceuticals aims to make India a major hub for an end to end drug discovery. The pharma sector has a competitive advantage of prospering steadily and thus attracts lots of young professionals looking at pharmaceutical as their prospective career option.

B. Voc. in Manufacturing Technology (Pharmaceutical Chemistry)

Course Introduction

By considering the latest practices in pharmaceutical industry, the syllabus is designed to meet the theoretical aspects required for Vocational Education. The syllabus is designed in consultation with subject matter experts from industry and colleges operating in Pharmaceuticals domain.

Eligibility for Admission

The eligibility for admission to B. Voc. in Manufacturing Technology (Pharmaceutical Chemistry) shall be 10+2 or equivalent, in science stream.

Career Prospects

B. Voc. in Manufacturing Technology (Pharmaceutical Chemistry) offers opportunities like Health Inspector, Analytical Chemist, Research Officer, Chemical/Drug Technician, Drug Therapist, Data Manager, Drug Inspector, Hospital Drug Coordinator, Medical Transcriptionist, Regulatory Manager.

Semester-wise Listing of courses

Semester	Subject code	Subject Name	Credits
I	GE 1.1	Functional English	4
	GE 1.2	Communication Skills - I	4
	GE 1.3	Computing Skills - I	4
	MTPC 1	Manufacturing Operations I – Size Reduction Techniques	2
	MTPC 2	Applied Physics	2
	MPTC 3	Applied Chemistry	2
	MTPCP 1	Vocational Practical	12
	GE 2.1	Basics of Economics and Markets	4

II	GE 2.2	Environment Sciences	4
	GE 2.3	Ethics and Governance	4
	MTPC 3.2	Applied Chemistry Part II and Basics of Total Productive Maintenance (TPM)	2
	MTPC 1.1	Manufacturing Operations II	2
	MTPC 5	Pharmaceutical Chemistry I	2
	MTPCP 2	Vocational Practical	12
III	GE 3.1	Communication Skills II	4
	GE 3.2	Financial Literacy	4
	GE 3.3	Basics of Legal and HR Policies	4
	MTPC 1.2	Manufacturing Operations III	2
	MTPC 5.1	Pharmaceutical Chemistry II	2
	MTPC 5.2	Pharmaceutical Chemistry III	2
	MTPCP 3	Vocational Practical	12
IV	GE 4.1	Computing Skills – II	4
	GE 4.2	Basics of Accounting	4
	GE 4.3	Design Thinking	4
	MTPC 6.2	Project Management and Supply Chain Management: Introduction	2
	MTPC 7.4	Pharmaceutical Chemistry IV and Pharmaceutical Analysis I	2
	MTPC 1.3	Manufacturing Operations IV	2
	MTPCP 4	Vocational Practical	12
V	GE 5.1	Digital Literacy	4
	GE 5.2	Health and Wellness	4
	GE 5.3	Personal Grooming	4
	MTPC 1.4	Manufacturing Operations V	2
	MTPC 9.4	Enterprise Resource Planning and Environmental Sciences	2
	MTPC 11	Supply Chain Management and Strategy	2
	MTPCP 5	Vocational Practical	12
VI	GE 6.1	Entrepreneurship	4
	GE 6.2	Employment Readiness	4
	GE 6.3	Effective Workplace Skills & Competencies	4
	MTPC 1.5	Manufacturing Operations VI	2
	MTPC 12.2	Good Engineering Practices and Engineering Drawing	2
	MTPC 13	International Regulatory Perspective of New Drug Development	2
	MTPCP6	Vocational Practical	12

		Electives: (1 Compulsory)	
	MTPC 15	Mechatronics	2
	MTPC 16	Biological Operations	2
	MTPC 17	DNA Technology	2
	MTPC 18	Fermentation Operations	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

