



# **FACULTY OF PHARMACEUTICAL SCIENCES**

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## **COURSE STRUCTURE**

(As Per Pharmacy Council of India)

## **BACHELOR OF PHARMACY**

**CVVM  
UNIVERSITY**

Aegis: Charutar Vidya Mandal (Estd.1945)

**Effective from Academic Year: 2022-23**



Faculty Name:

Faculty of Pharmaceutical Sciences

Programme Name:

Bachelor of Pharmacy

## Programme Structure Summary

SEMESTER 1												
Course Group	Course Code	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
				T	P	Tu	Cont. Hrs					
Core	108010101	Human Anatomy and Physiology – I	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010102	Pharmaceutical Analysis – I	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010103	Pharmaceutics – I	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010104	Pharmaceutical Inorganic Chemistry	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010105	Communication Skills +	2	2	–	–	2	15/06	35/14	–	–	50/20
Core	108010106	Remedial Biology +	2	2	–	–	2	15/06	35/14	–	–	50/20
Core	108010107	Remedial Mathematics +	2	2	–	–	2	15/06	35/14	–	–	50/20
Core	108010111	Human Anatomy and Physiology - I Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010112	Pharmaceutical Analysis - I Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010113	Pharmaceutics - I Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010114	Pharmaceutical Inorganic Chemistry Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010115	Communication Skills Practical +	1	–	2	–	2	–	–	15/06	35/14	50/20
Core	108010116	Remedial Biology Practical +	1	–	2	–	2	–	–	15/06	35/14	50/20

+ - Non University Examination

SEMESTER 2 (Revision – 1)												
Course Group	Course Code	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
				T	P	Tu	Cont. Hrs					
Core	108010201	Human Anatomy and Physiology II	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010202	Pharmaceutical Organic Chemistry I	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010203	Pharmaceutical Engineering	4	3	–	1	4	25/10	75/30	–	–	100/40
Core	108010204	Computer Applications in Pharmacy+	3	3	–	–	3	15/06	35/14	–	–	50/20
Core	108010205	Environmental Sciences+	3	3	–	–	3	15/06	35/14	–	–	50/20
Core	108010211	Human Anatomy and Physiology II Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010212	Pharmaceutical Organic Chemistry I Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010213	Pharmaceutical Engineering Practical	2	–	4	–	4	–	–	25/10	75/30	100/40
Core	108010214	Computer Applications in Pharmacy Practical +	1	–	2	–	2	–	–	15/06	35/14	50/20
Liberal Arts	900009902	Painting *	2	–	2	–	2	–	–	50/20	50/20	100/40
Liberal Arts	900009903	Photography *	2	–	2	–	2	–	–	50/20	50/20	100/40
Liberal Arts	900009904	Media and Graphics *	2	–	2	–	2	–	–	50/20	50/20	100/40
Liberal Arts	900009905	Music *	2	–	2	–	2	–	–	50/20	50/20	100/40
Liberal Arts	900009906	Dramatics *	2	–	2	–	2	–	–	50/20	50/20	100/40
Liberal Arts	900009907	Contemporary Dance *	2	–	2	–	2	–	–	50/20	50/20	100/40

\* A Course on Liberal Arts – Any One Course to be opted

+ - Non University Examination



Faculty Name:

Faculty of Pharmaceutical Sciences

Programme Name:

Bachelor of Pharmacy

SEMESTER 3 ( Revision – 1)												
Course Group	Course Code	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
				T	P	Tu	Cont. Hrs					
Core	108010301	Pharmaceutical Organic Chemistry –II	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010302	Physical Pharmaceutics -I	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010303	Biochemistry	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010304	Pathophysiology	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010305	Pharmacognosy and Phytochemistry –I	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	900009901	Creativity, Problem Solving and Innovation	2	-	2	-	2	-	-	50/20	50/20	100/40
Core	108010311	Pharmaceutical Organic Chemistry –II Practical	2	-	4	-	4	-	-	25/10	75/30	100/40
Core	108010312	Physical Pharmaceutics –I Practical	2	-	4	-	4	-	-	25/10	75/30	100/40
Core	108010313	Biochemistry Practical	2	-	4	-	4	-	-	25/10	75/30	100/40
Core	108010315	Pharmacognosy and Phytochemistry –I Practical	2	-	4	-	4	-	-	25/10	75/30	100/40

SEMESTER 4												
Course Group	Course Code	Course Name	Cr	Teaching Scheme				INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
				T	P	Tu	Cont. Hrs					
Core	108010401	Pharmaceutical Organic Chemistry -III	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010402	Medicinal Chemistry -I	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010403	Physical Pharmaceutics -II	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010404	Pharmacology –I	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010405	Pharmaceutical Jurisprudence	4	3	-	1	4	25/10	75/30	-	-	100/40
Core	108010412	Medicinal Chemistry –I Practical	2	-	4	-	4	-	-	25/10	75/30	100/40
Core	108010413	Physical Pharmaceutics –II Practical	2	-	4	-	4	-	-	25/10	75/30	100/40
Core	108010414	Pharmacology –I Practical	2	-	4	-	4	-	-	25/10	75/30	100/40



Faculty Name:

Faculty of Pharmaceutical Sciences

Programme Name:

Bachelor of Pharmacy

## Programme Outcomes

PO-1	<b>Pharmacy Knowledge:</b> Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.
PO-2	<b>Planning Abilities:</b> Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
PO-3	<b>Problem analysis:</b> Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.
PO-4	<b>Modern tool usage:</b> Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
PO-5	<b>Leadership skills:</b> Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.
PO-6	<b>Professional Identity:</b> Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).
PO-7	<b>Pharmaceutical Ethics:</b> Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.
PO-8	<b>Communication:</b> Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
PO-9	<b>The Pharmacist and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.
PO-10	<b>Environment and sustainability:</b> Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO-11	<b>Lifelong learning:</b> Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and to satisfy these needs on an ongoing basis.



Faculty Name: Faculty of Pharmaceutical Sciences

Programme Name: Bachelor of Pharmacy

Semester: I Academic Batch: 2022-23

Course Group	Board of Studies / Faculty Ownership	Course Code	Course Name	Cr	Teaching Scheme				Assessment/ Evaluation Type		External Exam Duration (Hrs.)		INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
					T	P	Tu	Cont. Hrs	T	P	T	P					
Core	Pharmacy	108010101	Human Anatomy and Physiology – I	4	3	–	1	4	T	–	3.0	–	25/10	75/30	–	–	100/40
Core	Pharmacy	108010102	Pharmaceutical Analysis – I	4	3	–	1	4	T	–	3.0	–	25/10	75/30	–	–	100/40
Core	Pharmacy	108010103	Pharmaceutics – I	4	3	–	1	4	T	–	3.0	–	25/10	75/30	–	–	100/40
Core	Pharmacy	108010104	Pharmaceutical Inorganic Chemistry	4	3	–	1	4	T	–	3.0	–	25/10	75/30	–	–	100/40
Core	Pharmacy	108010105	Communication Skills +	2	2	–	–	2	T	–	1.5	–	15/06	35/14	–	–	50/20
Core	Pharmacy	108010106	Remedial Biology +	2	2	–	–	2	T	–	1.5	–	15/06	35/14	–	–	50/20
Core	Pharmacy	108010107	Remedial Mathematics +	2	2	–	–	2	T	–	1.5	–	15/06	35/14	–	–	50/20
Core	Pharmacy	108010111	Human Anatomy and Physiology - I Practical	2	–	4	–	4	–	P	–	3.0	–	–	25/10	75/30	100/40
Core	Pharmacy	108010112	Pharmaceutical Analysis - I Practical	2	–	4	–	4	–	P	–	3.0	–	–	25/10	75/30	100/40
Core	Pharmacy	108010113	Pharmaceutics - I Practical	2	–	4	–	4	–	P	–	3.0	–	–	25/10	75/30	100/40
Core	Pharmacy	108010114	Pharmaceutical Inorganic Chemistry Practical	2	–	4	–	4	–	P	–	3.0	–	–	25/10	75/30	100/40
Core	Pharmacy	108010115	Communication Skills Practical +	1	–	2	–	2	–	P	–	2.0	–	–	15/06	35/14	50/20
Core	Pharmacy	108010116	Remedial Biology Practical +	1	–	2	–	2	–	P	–	2.0	–	–	15/06	35/14	50/20

# T = Theory, P = Practical, Tu = Tutorial

+ - Non University Examination

Name & Sign  
[Chairman - Board of Studies]:

Name & Sign  
[Dean / Director]:



Faculty Name: Faculty of Pharmaceutical Sciences

Programme Name: Bachelor of Pharmacy

Semester: II Revision - 1 Academic Batch: 2022-23

Course Group	Board of Studies / Faculty Ownership	Course Code	Course Name	Cr	Teaching Scheme				Assessment/ Evaluation Type		External Exam Duration (Hrs.)		INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
					T	P	Tu	Cont. Hrs	T	P	T	P					
Core	Pharmacy	108010201	Human Anatomy and Physiology II	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010202	Pharmaceutical Organic Chemistry I	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010203	Pharmaceutical Engineering	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010204	Computer Applications in Pharmacy +	3	3	-	-	3	T	-	1.5	-	15/06	35/14	-	-	50/20
Core	Pharmacy	108010205	Environmental Sciences +	3	3	-	-	3	T	-	1.5	-	15/06	35/14	-	-	50/20
Core	Pharmacy	108010211	Human Anatomy and Physiology II Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010212	Pharmaceutical Organic Chemistry I Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010213	Pharmaceutical Engineering Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010214	Computer Applications in Pharmacy Practical +	1	-	2	-	2	-	P	-	2.0	-	-	15/06	35/14	50/20
Liberal Arts	Fine Arts	900009902	Painting *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Liberal Arts	Fine Arts	900009903	Photography *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Liberal Arts	Fine Arts	900009904	Media and Graphics *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Liberal Arts	Fine Arts	900009905	Music *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Liberal Arts	Fine Arts	900009906	Dramatics *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Liberal Arts	Fine Arts	900009907	Contemporary Dance *	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40

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\* A Course on Liberal Arts – Any One Course to be opted

+ - Non University Examination

Name & Sign  
[Chairman - Board of Studies]:

Name & Sign  
[Dean / Director]:



Faculty Name: Faculty of Pharmaceutical Sciences

Programme Name: Bachelor of Pharmacy

Semester: III Revision - 1 Academic Batch: 2022-23

Course Group	Board of Studies / Faculty Ownership	Course Code	Course Name	Cr	Teaching Scheme				Assessment/ Evaluation Type		External Exam Duration (Hrs.)		INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
					T	P	Tu	Cont. Hrs	T	P	T	P					
Core	Pharmacy	108010301	Pharmaceutical Organic Chemistry -II	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010302	Physical Pharmaceutics -I	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010303	Biochemistry	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010304	Pathophysiology	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010305	Pharmacognosy and Phytochemistry -I	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Management	900009901	Creativity, Problem Solving and Innovation	2	-	2	-	2	-	P	-	2.0	-	-	50/20	50/20	100/40
Core	Pharmacy	108010311	Pharmaceutical Organic Chemistry -II Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010312	Physical Pharmaceutics -I Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010313	Biochemistry Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010315	Pharmacognosy and Phytochemistry -I Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40

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Name & Sign  
[Chairman - Board of Studies]:

Name & Sign  
[Dean / Director]:



Faculty Name:	Faculty of Pharmaceutical Sciences		
Programme Name:	Bachelor of Pharmacy		
Semester:	IV	Academic Batch:	2022-23

Course Group	Board of Studies / Faculty Ownership	Course Code	Course Name	Cr	Teaching Scheme				Assessment/ Evaluation Type		External Exam Duration (Hrs.)		INT(T) Max./ Passing	EXT(T) Max./ Passing	INT(P) Max./ Passing	EXT(P) Max./ Passing	Grand Total Max./ Passing
					T	P	Tu	Cont. Hrs	T	P	T	P					
Core	Pharmacy	108010401	Pharmaceutical Organic Chemistry -III	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010402	Medicinal Chemistry -I	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010403	Physical Pharmaceutics -II	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010404	Pharmacology -I	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010405	Pharmaceutical Jurisprudence	4	3	-	1	4	T	-	3.0	-	25/10	75/30	-	-	100/40
Core	Pharmacy	108010412	Medicinal Chemistry –I Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010413	Physical Pharmaceutics –II Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40
Core	Pharmacy	108010414	Pharmacology –I Practical	2	-	4	-	4	-	P	-	3.0	-	-	25/10	75/30	100/40

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