

Criterion I

ABOUT THE DEPARTMENT

The Department of Pharmaceutical Sciences, Doctor Hari Singh Gour Vishwavidyalaya, Sagar (Formerly known as Saugor University, SAGAR) of Madhya Pradesh has been a relentless and pioneer in spreading the pharmaceutical education in each nook and corner of globe. It was established in 1956 and has completed 65 years of successful journey.

Department has made significant contribution in pharmacy education and research. It has published more 180 research papers in last 5 years in various national and international journals. Faculty of Department has filed eight patents and having five patents awarded in his credit. Department has 14 no MOU's with Pharmaceutical Industries and reputed academic institutions and also organized number of seminar and conferences regularly. So far, department has produced **268** Ph.D. in Pharmaceutical Sciences. Various major research projects have been sanctioned to the faculty members of the department by AICTE, DST,UGC, CSIR, DBT, MPCST etc and they have made remarkable contribution to the profession.

Name	Department of Pharmaceutical Sciences	
NIRF Ranking	Ranked 11 in Pharmacy category in 2017	
Address	Department of Pharmaceutical Sciences, Dr. H. S. Gour Vishwavidyalaya, Sagar (MP)	
PIN	470003	
State	Madhaya Pradesh	
Phone no.	07582-264457, 264475, 264574	
Fax No.	264236	E-Mail: mail2dops@gmail.com
Web site	www.dhgsu.edu.in	
Nearest Rly Station	Sagar (06 Kms)	
Nearest Airport	Bhopal (200 Kms), Jabalpur (200 Kms)	

Name and particulars of the Head of the Department

Name	Prof. Vandana Soni			
Qualification	M.Pharm. Ph.D.			
Phone No.	07582	297136 (O)	Fax No.	264236
E-Mail	mail2dops@gmail.com	Mobile	09425172178	



History of the Department

The credit for founding the pharmacy course in university goes to Prof. A. K. Bhattacharya, the then Head of the Department. In July 1948 Diploma in soaps and Cosmetics was introduced. It was followed by a B. Sc Degree course with Chemistry, Pharmaceutical Chemistry and Industrial Chemistry in 1952. In 1952 University started offering B.Sc. in Pharmacy degree. Independent degree programme B. Pharm. Course under chemistry department was introduced in 1956. After sanction of one post of professor and two post for Readers by University Grant Commission, in 1957 separate new Department of Pharmaceutical Sciences was established. Soon after under graduate programme, Department started offering degree in Master of Pharmacy.



*The Chemistry Department and Colloquium
(where Diploma Course in Soap and Cosmetics and
subsequent Diploma in Pharmacy started)*







*The Members of the University Chemical Colloquium
(A Germ Centre of Department of Pharmaceutical Sciences,
Sagar)*








Summary of History of the Department





- Diploma in Soaps and Cosmetics- started in 1948 as a B.Sc. course of two-years duration introduced with Pharmaceutical Chemistry, Chemistry and Industrial Chemistry - 1952

- Post B. Sc. course of one-year duration introduced in 1954
- In 1955 AICTE inspected the Department & Recommended the adoption of the B. Pharm Course (Three years duration after Inter-Sciences)
- A new batch in pharmacy course introduced in July 1956
- Diploma course in Pharmacy conducted upto 1956 simultaneously with a B. Pharm (Honours) course for the Diploma holders.
- B. Pharm four years integrated course started in 1956 (on the recommendation of AICTE)
- Financial assistance received for the above courses by UGC and State Government
- M. Pharm course started in 1957
- UGC started awarding fellowships to 20 PG students 1962 onwards.
- Department is also running DST-FIST via FIST-I and FIST-2 grants.
- Department have one SAP (Special Assistance Programme) financially supported by UGC
- Department is QIP (Quality improvement program) centre for AICTE.
- This was the third Pharmacy Department in the country and first in the state
- Number of seats in M. Pharm. Was increased from 33 to 60 from session 2002-2003.

Heads of the department

	<ul style="list-style-type: none"> ▪ Late Prof. A.K. Bhattacharya (1946-1957)
	<ul style="list-style-type: none"> ▪ Prof. S.N. Sharma (Nov. 1957 to Dec. 1958 & Dec. 1960-April 1976)
	<ul style="list-style-type: none"> ▪ Late Prof. M.L. Schroff (Dec. 1958 to Nov. 1960)
	<ul style="list-style-type: none"> ▪ Late Prof. C.S. Chauhan (April 1976 to April 1977)

	<ul style="list-style-type: none"> ▪ Late Prof. K.C. Verma (April 1977 to April 1980 & Nov.1982 to Aug.1984)
	<ul style="list-style-type: none"> ▪ Prof. R.L. Khare (May 1980 to Oct. 1982 & Sept.1984 to April 1987)
	<ul style="list-style-type: none"> ▪ Prof. N.K. Jain (May 1987 to Dec. 1991 and Dec. 2001 to Dec. 2004)
	<ul style="list-style-type: none"> ▪ Prof. V.K. Dixit (Jan 1992 to Dec. 2001)
	<ul style="list-style-type: none"> ▪ Prof. S. P. Vyas (Dec. 2004 to Dec. 2007)
	<ul style="list-style-type: none"> ▪ Prof. M.D. Kharya (Dec.2007 to Dec. 2010)
	<ul style="list-style-type: none"> ▪ Prof. G.P. Agrawal (Dec 2010 to Oct 2013)

	<ul style="list-style-type: none"> ▪ Prof. D.V. Kohli (Nov. 2013 to Nov.2014)
	<ul style="list-style-type: none"> ▪ Prof. R.K. Agrawal (Dec 2014 to March 2015)
	<ul style="list-style-type: none"> ▪ Prof. Asmita Gajbhiye (March 2015 to March 2018)
	<ul style="list-style-type: none"> ▪ Prof. Sanjay K. Jain (March 2018 to March 2021)

Vision

“To be an outstanding Department of Excellence ever in pursuit of newer horizons to create self-reliant global pharmacists through assured quality education programmes”.

Mission

- Promotion of sustainable development of pharmaceutical education consistent with statutory and regulatory requirements.
- Provide WORLD CLASS AMBIENCE, ENVIRONMENT, infrastructure and learning resources for research and development as well as for the achievement of the objectives.
- Extend the frontiers of knowledge, through student development programmes.
- Make a significant research activity involving staff, student and society.
- Promote industry/organization, interaction/collaborations with regional, national & international bodies to promote academic, research, entrepreneurship as well as innovative skills in the students.
- Emphasise on society-oriented programmes in the areas of health and education with a common man as the focal point.
- Ensure that the academic, career and personal counselling are in-built into the system of curriculum delivery.

- Impart the spirit of enquiry and scientific temperament among students through research-oriented activities.
- Promulgate process for effective, continuous and objective-oriented student performance evaluation.
- Provide adequate opportunity and platform for expression of individual potentials

DEPARTMENT DISTINCTIONS

Ranking

Department of Pharmaceutical Sciences, Dr. Harisingh Gour University, Sagar was ranked 11 in Pharmacy category according to National Institutional Ranking Framework (NIRF), Ministry of Human Resource Development, Government of India in 2017.



Research:

Department harbors an excellent human resource for undergraduate, postgraduate and research which excel both in quality and profile. Some of the distinct features are:

Commonwealth Fellowship	1
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DADD Fellowship	2
Raman postdoctoral Fellowship	1
BOYSCAST Fellowship	4
Newton Bhabha PhD Fellow	1
Postdoctoral Fellowship	15
DST Inspire Fellows	4
M.P Young Scientist Awards	31
Patent Granted	5
Patent Filed	8

Uniqueness of the Department

Institutional Animal Ethics committee and Animal House

The department has a well-furnished animal house facility at its campus. The facility has been registered for breeding of and experiments on animals with the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), Ministry of Social Justice and Empowerment, Govt. of India.

Sophisticated instrument lab

The department is having separate sophisticated instrument laboratory equipped with modern instruments to facilitate interdisciplinary research. The instruments available at the departmental instrument lab are:

Shimadzu UV 1502 spectrophotometer, Gas Liquid Chromatography, Lyophilizers Heto Holten, Fourier Transform Infra Red, High Performance Liquid Chromatography, High Performance thin Layer Chromatography, Nano Plus PCS based Particle size analyzer, Ultracentrifuge, Multiplate Spectrofluorometer, Particle Size Analyzer (Cilas, France), Fluorecent spectrophotometer, Malvern Zeta sizer, Ultra Sonicator (Probe type), Gel documentation system, DNA hybridization chamber, DNA sequencer, Nano spray dryer, Elisa Microplate Reader, Microcentrifuges, Nikon Trinocular Research Microscope model NOE 200 with fluorescence and digital camera complete with accessories, Fermentor, Biosafety Cabinets.

Medicinal Garden

The Department has developed a Garden of Medicinal Plants and planted a variety of Medicinal Plants in the campus itself to provide a valuable knowledge to the students, staff and citizens and to get benefitted from the these Medicinal Plants.

All the activities like arrangement of seeds, plants, fertilizers, tools and tackles, watering facilities, selection of medicinal plants have been done by the students and staff with great enthusiasm. Help from subject experts has also been sought.



Departmental Medicinal Garden



Departmental Medicinal Garden

Remarkable contribution

Faculty in the Department of Pharmaceutical Sciences are pioneers, known for the research in the field of Novel drug delivery system, computer aided drug design and Herbal Technology. Research papers of very high impact factor have been published by the department. Moreover, patents are being regularly filed and many are granted.

University has its dedicated startup cell to encourage idea and implementation of startup proposed by the students. Two students of this department got 1st and 3rd position in the state level startup competition held at Indore under startup scheme of Government of India.

Every year more than 90% of students qualify National Level GPAT Examination with a very good all India Ranking. This high rate of GPAT selections are highest from any of the institutes in the country.

Resources/Facilities/ Instrumentation

Department Library

As an extension to central library, the department has established its own departmental library. The Department library has a vast collection of reference books, Pharmacopeia's and textbooks

with different titles relevant to the subject in order to provide ready assistance to the students particularly during their research work and practical classes. Library also possesses journals, magazines, dissertation reports and thesis. Library continued building up its collection by acquisition of new books/ journals as per the requirements of the Officers/Staff Members of the Department in order to cover all the subjects that are taught at bachelors, masters and research level. Nearly 1000 books and 667 dissertations are at present available in the departmental library.

Smart Classroom

The department has 6 smart classrooms that are equipped with projector, LED screen and smart TV for tech friendly teaching. The classroom is integrated with the digital displays, whiteboards, assistive listening devices, and other audio/visual components that make lectures easier, engaging, and more interactive.

CURRICULAR ASPECTS

Courses offered:

Department of Pharmaceutical Sciences offer CBCS based undergraduate & post graduate courses and Doctor in Philosophy in Pharmaceutical Sciences i.e is B.Pharm (with 60 intake); M.Pharm (in four core branches i.e is Pharmaceutics, pharmaceutical Chemistry, Pharmacognosy and Pharma-biotechnology) and Ph D. Based on the course credits and grade obtained by the student, grade point average is calculated. A minimum grade point average is required to be maintained for satisfactory progress and continuation in the programme. Also a minimum number of earned credits and a minimum grade point average should be acquired in order to qualify for the degree.

Details of the courses offer by the department of Pharmaceutical Science are as follows:

Ph.D. admission

Seats: Number of seats vary depending on the availability of supervisor. Two which shall be filled by the candidates selected by AICTE, New Delhi under Quality improvement program (QIP).

Eligibility: M.Pharm. 55 % marks (50 % for SC, ST and PC students) or equivalent CGPA in 7 or 10 point grade scale

- i. Through All India Entrance Examination conducted by university.
- ii. Direct admission:

Students with NET-JRF and CSIR-JRF are exempted from appearing in the entrance examination but the candidates have to appear for the interview.

Application Form: On line application forms are available on the university website during admission

M. Pharm.

The university conducts Post Graduate Entrance Test (PGET) at all India level in many states. The admission is given to the candidates on merit basis after counseling at the department level.

Seats: There are 56 seats(Pharmaceutics 18, Pharmaceutical. Chemistry 14, Pharmacognosy 13, Pharmaceutical Biotechnology 11) available with AICTE scholarship. In addition, there are 4 seats; (1 seat each in Pharmaceutics, Pharmaceutical Chemistry, Pharmacognosy and Pharm. Biotechnology) which shall be filled by the candidates selected by AICTE, New Delhi under QIP.

Eligibility: B.Pharm. with 55 % marks (50 % in case of SC, ST, and PWD candidates) or 5.4 CGPA marks with valid GPAT qualified score

Application Form: Online application forms are available on the university website

B. Pharm.

The university conduct Undergraduate Entrance Test (UGET) at all India level in many states. The admission is given to the candidates on merit basis after counseling at the department level.

Seats: There are 75 seats for B.Pharm.including 10% seats of EWS

Eligibility: Higher Secondary 10 + 2 with 45 % marks (40 % in case of SC, ST, and PWD candidates) with Chemistry, Physics and Biology or Mathematics or equivalent.

Application Form: On line application forms are available on the university website.

S. No.	Programs	Available seat	Eligibility
1	B. Pharm	75 including 10% of EWS	<ol style="list-style-type: none">1. Minimum age limit will be 17 years on or before 30th June of the academic year (relaxation in age will be as per central government guideline)2. Passed 10+2 or equivalent examination with minimum 45% marks or equivalent CGPA with english (relaxation will be given as per central government guideline)

2	M. Pharm	56 +4 (QIP) including 10% of EWS	<ol style="list-style-type: none"> 1. Maximum age limit will be 27 years on 1st July of the academic year (relaxation in age will be as per central government guideline) 2. Graduate in B Pharm with 55% or equivalent CGPA with valid GPAT/GATE score card 3. Entrance Test by University at all India level
	a) Pharmaceutics	19	
	b) Pharmaceutical Chemistry	15	
	c) Pharmacognosy	14	
	d) Pharmaceutical Biotechnology	12	
3	Ph. D: According to the seats available with the faculty (Supervisor)		<ol style="list-style-type: none"> 1. Master degree with minimum 55% marks or equivalent CPGA 2. GPAT/ NET and Entrance Exam at University level

Statuary body approval, if any

The Department of Pharmaceutical Sciences is approved from Pharmacy Council of India & AICTE, New Delhi.

Scheme of courses offered (B. Pharm/M. Pharm/Ph.D)

B. Pharm Programme

Course code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-1101	Human Anatomy and Physiology I–Theory	3	1	4
PHS-CC-1102	Pharmaceutical Analysis I – Theory	3	1	4
PHS-CC-1103	Pharmaceutics I – Theory	3	1	4
PHS-CC-1104	Pharmaceutical Inorganic Chemistry – Theory	3	1	4

PHS-CC-1105	Communication skills – Theory *	2	-	2
PHS-EC-1106	Remedial Biology	2	-	2
	OR			
PHS-EC-1107	Remedial Mathematics – Theory*	2	-	2
PHS-CC-1108	Human Anatomy and Physiology – Practical	4	-	2
PHS-CC-1109	Pharmaceutical Analysis I – Practical	4	-	2
PHS-CC-1110	Pharmaceutics I – Practical	4	-	2
PHS-CC-1111	Pharmaceutical Inorganic Chemistry – Practical	4	-	2
PHS-CC-1112	Communication skills – Practical*	2	-	1
PHS-EC-1113	Remedial Biology – Practical*	2	-	1
	Total	34[§]/36[#]	4	29[§]/30[#]

[#]Applicable ONLY for the students who have studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB)course.

[§]Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM)course.

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-2101	Human Anatomy and Physiology II – Theory	3	1	4
PHS-CC-2102	Pharmaceutical Organic Chemistry I – Theory	3	1	4
PHS-CC-2103	Physical Pharmaceutics-I – Theory	3	1	4
PHS-EC-2104	Computer Applications in Pharmacy – Theory *	3	-	3
PHS-EC-2105	Environmental sciences – Theory *	3	-	3
PHS-CC-2106	Human Anatomy and Physiology II –Practical	4	-	2
PHS-CC-2107	Pharmaceutical Organic Chemistry I– Practical	4	-	2
PHS-CC-2108	Physical Pharmaceutics-I – Practical	4	-	2

PHS-EC-2109	Computer Applications in Pharmacy – Practical*	2	-	1
	Total	29	3	25

Table-III: Course of study for semester III

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-3101	Pharmaceutical Organic Chemistry II – Theory	3	1	4
PHS-CC-3102	Biochemistry – Theory	3	1	4
PHS-CC-3103	Pharmaceutical Microbiology – Theory	3	1	4
PHS-CC-3104	Pharmaceutical Engineering – Theory	3	1	4
PHS-CC-3105	Pathophysiology – Theory	3	1	4
PHS-CC-3106	Pharmaceutical Organic Chemistry II – Practical	4	-	2
PHS-CC-3107	Biochemistry – Practical	4	-	2
PHS-CC-3108	Pathophysiology – Practical	2	-	1
PHS-CC-3109	Pharmaceutical Microbiology – Practical	4	-	2
PHS-CC-3110	Pharmaceutical Engineering –Practical	4	-	2
	Total	33	5	29

Table-IV: Course of study for semester IV

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-4101	Pharmaceutical Organic Chemistry III– Theory	3	1	4
PHS-CC-4102	Medicinal Chemistry I – Theory	3	1	4
PHS-CC-4103	Physical Pharmaceutics II – Theory	3	1	4
PHS-CC-4104	Pharmacology I – Theory	3	1	4
PHS-CC-4105	Pharmacognosy and Phytochemistry I– Theory	3	1	4

PHS-CC-4106	Medicinal Chemistry I – Practical	4	-	2
PHS-CC-4107	Physical Pharmaceutics II – Practical	4		2
PHS-CC-4108	Pharmacology I – Practical	4	-	2
PHS-CC-4109	Pharmacognosy and Phytochemistry I – Practical	4	-	2
	Total	31	5	28

Table-V: Course of study for semester V

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-5101	Medicinal Chemistry II – Theory	3	1	4
PHS-CC-5102	Industrial PharmacyI– Theory	3	1	4
PHS-CC-5103	Pharmacology II – Theory	3	1	4
PHS-CC-5104	Pharmacognosy and Phytochemistry II– Theory	3	1	4
PHS-CC-5105	Pharmaceutical Jurisprudence – Theory	3	1	4
PHS-CC-5106	Medicinal Chemistry II – Practical	4	-	2
PHS-CC-5107	Industrial Pharmacy I – Practical	4	-	2
PHS-CC-5108	Pharmacology II – Practical	4	-	2
PHS-CC-5109	Pharmacognosy and Phytochemistry II – Practical	4	-	2
	Total	31	5	28

Table-VI: Course of study for semester VI

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-6101	Medicinal Chemistry III – Theory	3	1	4
PHS-CC-6102	Pharmacology III – Theory	3	1	4
PHS-CC-6103	Cosmetics Science – Theory	3	1	4

PHS-CC-6104	Pharmaceutical Biotechnology – Theory	3	1	4
PHS-CC-6105	Quality Assurance –Theory	3	1	4
PHS-CC-6106	Medicinal chemistry III – Practical	4	-	2
PHS-CC-6107	Pharmacology III – Practical	4	-	2
PHS-CC-6108	Cosmetics Science – Practical	4	-	2
PHS-CC-6109	Pharmaceutical Biotechnology – Practical	4	-	2
	Total	31	5	28

Table-VII: Course of study for semester VII

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-7101	Instrumental Methods of Analysis – Theory	3	1	4
PHS-CC-7102	Industrial Pharmacy II – Theory	3	1	4
PHS-CC-7103	Pharmaceutical Managements – Theory	3	1	4
PHS-CC-7104	Novel Drug Delivery System – Theory	3	1	4
PHS-CC-7105	Social and Preventive Pharmacy-Theory	3	1	4
PHS-CC-7106	Instrumental Methods of Analysis – Practical	4	-	2
PHS-CC-7107	Novel Drug Delivery System – Practical	4	-	2
PHS-CC-7108	Practice School*	12	-	6
	Total	35	5	30

Table-VIII: Course of study for semester VIII

Course Code	Name of the course	No. of hours	Tutorial	Credit points
PHS-CC-8101	Biostatistics and Research Methodology	3	1	4
PHS-CC-8102	Pharmacy Practice	3	1	4

PHS-CC-8103	Biopharmaceutics and Pharmacokinetics-Theory	3	1	4
PHS-CC-8104	Herbal Drug Technology-Theory	3	1	4
PHS-CC-8105	Biopharmaceutics and Pharmacokinetics- Practical	4	-	2
PHS-CC-8106	Herbal Drug Technology-Practical	4	-	2
PHS-CC-8107	Project Work	12	-	6
PHS-CE-----	Elective	3	1	4
	Total	35	4	30

Elective Subjects:

PHS-EC-8108	Pharmaceutical Regulatory Science	3	1	4
PHS-EC-8109	Pharmacovigilance			
PHS-EC-8110	Quality Control and Standardization of Herbal			
PHS-EC-8111	Computer Aided Drug Design			
PHS-EC-8112	Cell and Molecular Biology			
PHS-EC-8113	Cosmetic Science			
PHS-CC-8114	Experimental Pharmacology			
PHS-EC-8115	Advanced Instrumentation Techniques			
PHS-EC-8116	Dietary Supplements and Nutraceuticals			

M. Pharm.

First semester

S. No.	Name of School	Compulsory Course	Course Code	Name of Course	Per Week Load			
					L	T	P	C
1	School of Engineering and Technology (EAT)	Course I	PHS CC 1201	Methods in Pharmaceutical Research (MPR)	4	-	-	4

		Course II	PHS CC 1202	Product Development	4	-	-	4
		Course III	PHS CC 1203	Pharmaceutical Biotechnology	4	-	-	4
		Course IV	PHS CC 1204	MPR Practicals(P)	-	-	8	4
		Course V	PHS CC 1205	Product Development Practicals (P)	-	-	8	4
		Course VI	PHS CC 1206	Pharmaceutical Biotechnology Practicals (P)	-	-	8	4
				Total Credits	12	-	24	24

Second semester:

Specialization: Pharmaceutics

S. No.	Name of School	Compulsory Course	Course Code	Name of Course	Per Week Load				
					L	T	P	C	
1	School of Engineering and Technology (EAT)	Course I	PHSP CC 2201	Advanced Pharmaceutics	4	-	-	4	
		Course II	PHSP CC 2202	Biopharmaceutics and Pharmacokinetics	4	-	-	4	
		Course III	PHSP CC 2203	Novel Drug Delivery System (NDDS)	4	-	-	4	
		Course IV	PHSP CC 2204	Advanced Pharmaceutics	-	-	16	8	
		Course V	PHSP CC 2205	DRA;IPR and QA	4			4	
		Dissertation Project PHSP CC 2206			Dissertation Project				4
					Total Credits	16		16	28

Second semester:

Specialization: Pharmaceutical Chemistry

S. No.	Name of School	Compulsory Course	Course Code	Name of Course	Per Week Load			
					L	T	P	C
1	School of Engineering and Technology (EAT)	Course I	PHSCCC 2201	Drug Design and Discovery	4	-	-	4
		Course II	PHSC CC 2202	Advances in Medicinal Chemistry	4	-	-	4
		Course III	PHSC CC 2203	Advanced Organic Chemistry	4	-	-	4
		Course IV	PHSC CC 2204	Advanced Pharmaceutical Chemistry Practical (P)	-	-	16	8
		Course V	PHSC CC 2205	DRA;IPR and QA	4			4
		Dissertation Project PHSC CC 2206		Dissertation Project				4
				Total Credits	16		16	28

Second semester:

Specialization: Pharmacognosy

S. No.	Name of School	Compulsory Course	Course Code	Name of Course	Per Week Load			
					L	T	P	C
1	School of Engineering and Technology (EAT)	Course I	PHSG CC 2201	Natural Products	4	-	-	4
		Course II	PHSG CC 2202	Advanced Pharmacognosy	4	-	-	4
		Course III	PHSG	Plant	4	-	-	4

			CC 2203	Biotechnology				
		Course IV	PHSG CC 2204	Advanced Pharmacognosy (P)	-	-	16	8
		Course V	PHSG CC 2205	DRA;IPR and QA	4			4
		Dissertation Project PHSG CC 2206		Dissertation Project				4
				Total Credits	16		16	28

Second semester:

Specialization: Pharmaceutical Biotechnology

S. No.	Name of School	Compulsory Course	Course Code	Name of Course	Per Week Load				
					L	T	P	C	
1	School of Engineering and Technology (EAT)	Course I	PHSB CC 2201	Advanced Biotechnology	4	-	-	4	
		Course II	PHSB CC 2202	Molecular Biology And Genetic Engineering	4	-	-	4	
		Course III	PHSB CC 2203	Industrial Biotechnology	4	-	-	4	
		Course IV	PHSB CC 2204	Pharmaceutical Biotechnology (P)	-	-	16	8	
		Course V	PHSB CC 2205	DRA/IPR/QA	4			4	
		Dissertation Project PHSB CC 2206		Dissertation Project*					4
				Total Credits		16		16	28

Syllabus to be prepared under the guidance of the Supervisor for the Project to be carried out during III and IV Semester.

Third semester:

**Specialization: Pharmaceutics/ Pharmaceutical Chemistry/ Pharmacognosy/
Pharmaceutical Biotechnology**

S. No.	Name of School	Course	Course Code	Name of Course	Per Week Load			
					L	T	P	C
1	School of Engineering and Technology (EAT)	Elective I,II,III,IV	PHS EC 3201	Elective* I,II,III,IV	3	-	-	3
			PHS EC 3202					
			PHS EC 3203					
			PHS EC 3204					
		Project Major	PHSP CC 3205	Project Major	-	-	-	12
			PHSC CC 3205					
			PHSG CC 3205					
		Project Minor	PHSP CC 3206	Project Minor	-	-	-	05
			PHSC CC 3206					
			PHSG CC 3206					
PHSB CC 3206								
				Total Credits	3		-	20

*** Elective Papers & Course Code:**

- i) Cosmeticology : PHS EC 3201
 ii) Immunology and Immunoassays : PHS EC 3202
 iii) Phytopharmaceuticals and Nutraceuticals : PHS EC 3203
 iv) Advanced Pharm. Chemistry : PHS EC 3204

Fourth semester:

**Specialization: Pharmaceutics/ Pharmaceutical Chemistry/ Pharmacognosy/
 Pharmaceutical Biotechnology**

S. No.	Name of School	Course	Course Code	Name of Course	Per Week Load			
					L	T	P	C
1	School of Engineering and Technology (EAT)		PHSP CC 4201	Project Major	-	-	-	20
			PHSC CC 4201					
			PHSG CC 4201					
			PHSB CC 4201					
				Total Credits	-	-	-	20

* Major Project Valuation by External Examiner

Scheme of Ph.D. Course Work

W.E.F.: Session 2020-21

Course code	Title	Credits
PHS CC 1401	Research Methodology (Theory)	04
PHS CC 1402	Current Trends in Pharmaceutical Sciences (Theory)	03
PHS CC 1403	Research and Publication Ethics (Theory)	01
PHS EC 1404a	Advances in Pharmaceutics Research (Theory)	04*

PHS EC 1404 b	Molecular Biology in Targeted Drug delivery (Theory)	
PHS EC 1404 c	Advances in Medicinal Chemistry (Theory)	
PHS EC 1404 d	Advances in Herbal Drug Technology (Theory)	
PHS CC 1405	Current Trends in Pharmaceutical Sciences (Practical)	01
PHS CC 1406	Research and Publication Ethics (Practical)	01
PHS CC 1407	Review of Published Research	03
PHS CC 1408	Seminar & Viva-Voce	01
	Course Credit	18

**Any one of four elective subjects is to be opted.*

Curriculum design & development

Department of Pharmaceutical Sciences is currently All India Council for Technical Education (AICTE) and Pharmacy Council of India (PCI) approved and we follow rules and regulations as prescribed by them from time to time. Departments of the University is implementing the Semester and Choice Based Credit System (CBCS) and it is globally well accepted.

The syllabus has been periodically revised to keep it uniformity with the university examination policy in the year 2016-17. In session 2017-18 the Department has adopted schemes and syllabus as per PCI regulations (for B. Pharm course) with slight modification. Some important aspects were incorporated in it as per local and global requirements. During this session concept of practice school was also adopted by PCI as well as our department. In practice school each student must undergo practical training of 150 hours in Pharmaceutical Industry, Hospital, Production Unit, Quality Control Department, Quality Assurance Department, Analytical Laboratory, Chemical Manufacturing Unit, Pharmaceutical R&D, Hospital (Clinical Pharmacy), Clinical Research Organization, Community Pharmacy, Drug Store at Government Hospitals. Now, syllabus has Industry required Subjects and Topics, keeping in view of the advances happening in the field of pharmaceutical sciences.

REVISION OF SYLLABUS			
YEAR	Name of programme	Programme Code	Dates of revision
2013-14	B. Pharm M. Pharm	1013 2001	2013-2014 : No modification
2014-15	Pharmacy B. Pharm	Code: 54	2014-2015 : No modification

	M. Pharm		
2015-16	B. Pharm M. Pharm	Code: 1013 Code: 2001	2015-16 Syllabus not modified
2016-17	B. Pharm M. Pharm	Code: 1013 Code: 2001	2016 dated 27.04.2016: The syllabus is slightly modified to keep it uniform with the University examination policy.
2017-2018	B. Pharm M. Pharm	1013 2001	2017-18 dated 15.03.2017, 11.04.2017 and 17.10.17: The scheme (as given by the PCI) is slightly modified to keep it complied with the University examination policy. Syllabus of B. Pharm was adopted as per the PCI recommendation and revision of M Pharm syllabus and adaptation under process.
2018-2019	Pharmacy B. Pharm M. Pharm	Code: 54	2018 dated 11.06.18, 20.11.18: The scheme (as given by the PCI) is slightly modified to keep it uniform with the University examination policy. Syllabus of B. Pharm was adopted as per the PCI recommendation and revision of M Pharm syllabus and adaptation under process.
2019-2020	B. Pharm M. Pharm	1001 2001	8.8.19 and 29.8.19 Syllabus not modified

The Department conducts Board of studies meetings regularly for effective modification of syllabus and implementation of the curriculum.

The academic calendar issued by academic council for scheduling the Semester plan, which, consists of schedules of Mid semester and University Semester End Examinations.

The subject Teachers develop their teaching method for the effective learning of the Topics or Concepts (Industry/Hospital/Society need based), beyond the Regular University Syllabus.

Teachers are encouraged to impart the curriculum through innovative, effective teaching and learning methods in form of presentations, assignments, discussions, workshops, seminars apart from regular lecture sessions.

Individual Syllabus of the B.Pharm and M.Pharm have programme objectives and programme outcomes which are employability oriented. Expertise of faculty members, scientist working in Pharma Industries and Government Research Institutes is utilized to frame the syllabus which is regularly updated.

Department harbours students from all over the country. The globalization has necessitated the learning of English communication skill in an international perspective. Moreover, the text materials on the subjects of technical education, science and medicine are available in English. So, in the present scenario, teaching English to the newly admitted students is necessary for their

effective communication. Moreover, equips students with the knowledge and skills needed to raise the environmental consciousness. With environmental challenges popping up faster than expected, it is compulsory to build environmental awareness, and get more involved in conservation efforts. The earlier the students learn about the environment, the sooner they'll be able to contribute to safeguard it. Therefore these two aspects i.e. Communication Skills & Environment Sciences are included in B.Pharm I year syllabus.

Industrial/Educational Tour was the part of B. Pharm curriculum (Up to 2018), in which students of B. Pharm VI Semester use to visit various Pharmaceuticals Industries & Government Institutes throughout the country. From 2018 onwards as per PCI guidelines students are undergoing training under Practice school concept.

IQAC of our university regularly take structured feedback from student, teachers, alumni & employees from all the departments.





Industrial Visit of B. Pharm Students