CRITERION 1 – CURRICULAR ASPECTS

1.2.1 PERCENTAGE OF PROGRAMMES IN WHICH CHOICE-BASED CREDIT SYSTEM (CBCS)/ELECTIVE COURSE SYSTEM HAS BEEN IMPLEMENTED, WHEREVER PROVISION WAS MADE BY THE REGULATORY BODIES (DATA FOR THE PRECEDING ACADEMIC YEAR)

To reduce enormous use of paper and printing the ensure data, sign and a seal by the Competent Authority for all the papers, we have used the Class-3 Digital Signatures where a Registration Authority i.e. Dr. Mahipal Singh, Registrar of our University authenticate the documents and responses claimed in this pdf file.

School of Agriculture and Environmental Sciences

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Agriculture And Environmental Sciences

Ordinances,Regulations&Syllabus

For

Bachelor of Science in Agriculture
(B.Sc.Ag.)FourYearProgramme SemesterPattern
(w.e.f.session2013-14)

Revised andapprovedin the year2019(13th Meeting of the BoardofStudies)

Examinationand Evaluation System

- Fifth Deans' Committee deliberated on the examination and evaluation system beingfollowedby differentuniversities.The Committee recommendsUniformGradingsystem to be followed with uniform OGPA requirements for award of degrees at alllevels and uniform conversion formulae to be followed for declaration of I, II and IIIdivisions, distinctions etc. Declaration of division in the degree certificate to be madecompulsorybyall universities:

Examination

- External theory(50%)
- Internal Theory+ Practical(50%)
- CourseswithTheoryandPractical:Mid-termExam(30%)+Assignment(5%)inpracticaloriented courses+Practical(15%)
- CourseswithonlyTheory:Mid-termExam(40%) +Assignment(10%)
- CourseswithonlyPractical: (100%)Internal
- Paper to be set by external: HOD shall ensure the coverage of syllabus. If neededmoderation can bedone.
- Evaluation to bedoneinternally by the faculty other than theCourseInstructor.Syllabus of the concerned course shall be sent to the external examiner, who shallpreparethequestionpapers.Forpractical,itisrecommendedthatexaminationshallbe conducted bycourse instructor(s)and one teachernominatedbyHOD.

Evaluation

Degree	Percentageof Marks Obtained	Conversion into Points
All	100	10 Points
	90 to <100	9 to <10
	80 to <90	8 to <9
	70 to <80	7 to <8
	60 to <70	6 to <7
	50 to <60	5 to <6
	<50(Fail)	<5
	Eg.80.76	8.076
	43.60	4.360
	72.50(but shortage in attendance)	Fail(1point)

OGPA	Division
5.000 – 5.999	Pass
6.000 – 6.999	IIdivision
7.000 – 7.999	Idivision
8.000andabove	I division with distinction

- GPA = Total points scored / Total credits (for 1 semester)
- CGPA = ∑Total points scored / Course credits
- OGPA = ∑Total points scored (after excluding failure points) / Course credits
- % of Marks = OGPA x 100 / 10

B.Sc.(Ag.) SEMESTER-I

S. No	Subject Code	Title	Cr	L	T	P
1.	BAG-101	FundamentalsofHorticulture	2	1	0	2
2.	BAG-103	FundamentalsofPlantBiochemistryand Biotechnology	3	2	0	2
3.	BAG-105	Fundamentalsof Soil Science	3	2	0	2
4.	BAG-107	Introduction to Forestry	2	1	0	2
5.	BAG-109/ BAG-109A/ BAG-109B/ BAG-109C/	Comprehension&Communication Skillsin English/ English Grammar-I/ Soft Skills-I/ Life Management-I/	2	1	0	2
6.	BAG-111	FundamentalsofAgronomy	4	3	0	2
7.	BAG-113	IntroductoryBiology*	1	1	0	0
8.	BAG-115/ BAG-115A BAG-115B	ElementaryMathematics*/ Fundamentals of Statistics/ Statistical Thinking and Data Analysis	2	2	0	0
9.	BAG-117	AgriculturalHeritage*	1	1	0	0
10.	BAG-119/ BAG-119A/ BAG-119B/ BAG-119C	Rural Sociology&Educational Psychology/ Science, Technology, and Society/ Women's and Gender Studies/ Geography of the Global Economy	2	2	0	0
11.	BAG-121/ BAG-121A/ BAG-121**B**/ BAG121C/	HumanValues&Ethics(non gradial)/ Global Climate Policy and Sustainability/ Planetary Change and Human Health/ Tools for Sustainable Design	1	1	0	0
12.	BAG123/ BAG-123A/ BAG-123B/ BAG-123C	NSS/ NCC/ PhysicalEducation&Yoga Practices**/ Water, Sanitation and Hygiene	2	0	0	4
	Total		**25**	**17**	**0**	**16**
*R:Remedial course;**NC: Non-gradial courses- 18+03*+03**						

B.Sc.(Ag.) SEMESTER-II

S. No	Subject Code	Title	Cr	L	T	P
1.	BAG-102	Fundamentalsof Genetics	3	2	0	2
2.	BAG-104	AgriculturalMicrobiology	2	1	0	2
3.	BAG-106	SoilandWater ConservationEngineering	2	1	0	2
4.	BAG-108	Fundamentals of CropPhysiology	2	1	0	2
5.	BAG-110	FundamentalsofAgriculturalEconomics	2	2	0	0
6.	BAG-112	Fundamentals ofPlantPathology	4	3	0	2
7.	BAG-114	Fundamentals of Entomology	4	3	0	2
8.	BAG-116	FundamentalsofAgriculturalExtension Education	3	2	0	2
9.	BAG-118/ BAG-118A/ BAG-118B/ BAG-118C	CommunicationSkillsand PersonalityDevelopment/ English Grammar-II/ Soft Skills-II/ Life Management-II/	2	1	0	2
	Total		**24**	**16**	**0**	**16**

B.Sc.(Ag.) SEMESTER-III

S. No	Subject Code	Title	Credit Hours			
			Cr	L	T	P
1.	BAG-201	Crop Production Technology–I(Kharif Crops)	2	1	0	2
2.	BAG-203	FundamentalsofPlantBreeding	3	2	0	2
3.	BAG-205	AgriculturalFinanceandCooperation	3	2	0	2
4.	BAG-207	Agri- Informatics	2	1	0	2
5.	BAG-209	FarmMachineryand Power	2	1	0	2
6.	BAG-211	Production Technologyfor Vegetables and Spices	2	1	0	2
7.	BAG-213	Environmental Studiesand DisasterManagement	3	2	0	2
8.	BAG-215/ BAG-215A/ BAG-215B/ BAG-215C	Statistical Methods/ Introduction to Mathematical Programming/ Introduction to Modeling and Simulation/ Algebraic Techniques and Semidefinite Optimization	2	1	0	2
9.	BAG-217	Livestock andPoultryManagement	4	3	0	2
	Total		**23**	**14**	**0**	**18**

B.Sc.(Ag.) SEMESTER-IV

S. No	Subject Code	Title	Cr	L	T	P
			CreditHours			
1.	BAG-202	Crop ProductionTechnology–II(Rabi Crops)	2	1	0	2
2.	BAG-204	Production TechnologyforOrnamentalCrops,MAP andLandscaping	2	1	0	2
3.	BAG-206	Renewable EnergyandGreenTechnology	2	1	0	2
4.	BAG-208	Problematic Soilsand theirManagement	2	1	0	0
5.	BAG-210	ProductionTechnologyforFruitandPlantation Crops	2	1	0	2
6.	BAG-212	PrinciplesofSeedTechnology	3	2	0	2
7.	BAG-214	FarmingSystem&Sustainable Agriculture	1	1	0	0
8.	BAG-216	AgriculturalMarketingTrade&Prices	3	2	0	2
9.	BAG-218	IntroductoryAgro-meteorology&ClimateChange	2	1	0	2
10.	BAG-220	Elective Course	3	2	0	2
	Total		**22**	**13**	**0**	**16**

B.Sc.(Ag.) SEMESTER-V

S. No	Subject Code	Title	Cr	L	T	P
			CreditHours			
1.	BAG-301	PrinciplesofIntegratedPestandDiseaseManagement	3	2	0	2
2.	BAG-303	Manures,Fertilizers andSoil FertilityManagement	3	2	0	2
3.	BAG-305	PestsofCropsandStoredGrainand their Management	3	2	0	2
4.	BAG-307	DiseasesofField and HorticulturalCrops and their Management–I	3	2	0	2
5.	BAG-319	Crop Improvement-I(KharifCrops)	2	0	0	4
6.	BAG-311/ BAG-311A/ BAG-311B/ BAG-311C	EntrepreneurshipDevelopmentandBusinessCommunication/ English Grammar-III/ Soft Skills-III/ Life Management-III	2	1	0	2
7.	BAG-313	Geo-informatics,Nano-technologyandPrecision Farming	2	1	0	2
8.	BAG-315	PracticalCrop Production –I(Kharif crops)	2	1	0	2
9.	BAG-317/ BAG-317A/ BAG-317B	IntellectualPropertyRights/ Research Methodology/ Publication Ethics and Emerging trends in Research	1	1	0	0
10.	BAG-319	Elective Course	3	2	0	2
	Total		**24**	**14**	**0**	**20**

B.Sc.(Ag.) SEMESTER-VI

S. No	Subject Code	Title	Cr	L	T	P
1.	BAG-302	RainfedAgriculture&WatershedManagement	2	1	0	2
2.	BAG-304	Protected Cultivation and SecondaryAgriculture	2	1	0	2
3.	BAG-306	DiseasesofField and HorticulturalCrops and their Management-II	3	2	0	2
4.	BAG-308	Post-harvestManagementandValue AdditionofFruits andVegetables	2	1	0	2
5.	BAG-310	ManagementofBeneficialInsects	2	1	0	2
6.	BAG-312	Crop Improvement-II(Rabicrops)	2	1	0	2
7.	BAG-314	PracticalCrop Production –II(Rabi crops)	2	1	0	2
8.	BAG-316	PrinciplesofOrganicFarming	2	1	0	2
9.	BAG-318	FarmManagement, Production&Resource Economics	2	1	0	2
10.	BAG-320	Principles ofFood Scienceand Nutrition	2	2	0	0
11.	BAG-321	Elective Course	3	2	0	2
	Total		**24**	**14**	**0**	**20**

B.Sc.(Ag.) SEMESTER-VII

S. No	Subject Code	Rural Agricultural Work Experience and Agro-industrial Attachment(RAWE&AIA)		
		Activities	**No. of weeks**	**Credit Hours**
1.	BAG-401	General orientation&On campustrainingbydifferent faculties	1	14
2.	BAG-403	Villageattachment	8	
3.	BAG-405	UnitattachmentinUniv./College.KVK/ResearchStation Attachment	5	
4.	BAG-407	Plant clinic	2	02
5.	BAG-409	Agro-IndustrialAttachment	3	04
6.	BAG-411	Project ReportPreparation,Presentationand Evaluation	1	
	TotalweeksforRAWE&AIA		**20**	**20**

- Agro- Industrial Attachment: The students would be attached with the agro-industriesfor a period of 3 weeks to get an experience of the industrial environment andworking.
- Educational tour will be conducted in break between IV & V Semester or VI & VIISemester

RAWE

Component-I:VillageAttachmentTrainingProgramme

S. No	Activity	Duration
1.	Orientation andSurveyofVillage	1week
2.	AgronomicalInterventions	1 week
3.	PlantProtection Interventions	1 week
4.	SoilImprovement Interventions(Soil samplingand testing)	1week
5.	FruitandVegetableproductioninterventions	1 week
6.	FoodProcessingand Storageinterventions	
7.	AnimalProductionInterventions	1 week
8.	Extension andTransferofTechnologyactivities	1 week

Component–II:AgroIndustrial Attachment
- Students shall be placed in Agro and Cottage industries and CommoditiesBoardsfor 03 weeks.
- IndustriesincludeSeed/Saplingproduction,Pesticides-insecticides,Postharvest-processing-valueaddition,Agri-financeinstitutions,etc.

B.Sc.(Ag.) SEMESTER-VIII

S. No	Subject Code	Title	Cr	L	T	P
1.	BAG-402	ProductionTechnologyfor Bioagentsand Biofertilizer	1	0	0	2
2.	BAG-404	SeedProductionandTechnology	1	0	0	2
3.	BAG-406	Mushroom CultivationTechnology	1	0	0	2
4.	BAG-408	Soil, Plant,Water and SeedTesting	1	0	0	2
5.	BAG-410	CommercialBeekeeping	1	0	0	2
6.	BAG-412	PoultryProductionTechnology	1	0	0	2
7.	BAG-414	CommercialHorticulture	1	0	0	2
8.	BAG-416	Floriculture and Landscaping	1	0	0	2
9.	BAG-418	FoodProcessing	1	0	0	2
10.	BAG-420	AgricultureWaste Management	1	0	0	2
11.	BAG-422	OrganicProductionTechnology	1	0	0	2
12.	BAG-424	CommercialSericulture	1	0	0	2
	Total		**12**	**0**	**0**	**24**

EvaluationofExperientialLearningProgramme/Hands-onTraining(HOT)

S. No	Parameters	Max.Marks
1.	Project PlanningandWriting	10
2.	Presentation	10
3.	Regularity	10
4.	MonthlyAssessment	10
5.	Output delivery	10
6.	TechnicalSkill Development	10
7.	EntrepreneurshipSkills	10
8.	Business networkingskills	10
9.	Report WritingSkills	10
10.	FinalPresentation	10
	Total	**100**

Elective Courses

- A student can select three elective courses out of the following and offer during 4th(BAG-220), 5th(BAG-319) and 6th(BAG-321) semesters.

S. No.	Courses	Credit Hours
1.	AgribusinessManagement	3(2+1)
2.	Agrochemicals	3(2+1)
3.	CommercialPlantBreeding	3(1+2)
4.	Landscaping	3(2+1)
5.	Food Safetyand Standards	3(2+1)
6.	Biopesticides&Biofertilizers	3(2+1)
7.	ProtectedCultivation	3(2+1)
8.	MicropropagationTechnologies	3(1+2)
9.	Hi-tech.Horticulture	3(2+1)
10.	WeedManagement	3(2+1)
11.	System Simulation and Agro-advisory	3(2+1)
12.	AgriculturalJournalism	3(2+1)

School of Pharmacy (AVIPS)

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School Of Pharmacy

Ordinances, Regulations & Syllabus

For

Master of Pharmacy (M.Pharm) 2 Year Programme Semester Pattern (w.e.f. session 2019-2020)

<mark>**Approved by PCI and adopted in the year 2019 (13th Meeting ,Board of Studies)**</mark>

1

CHAPTER –I:REGULATIONS

1. Short Title and Commencement

These regulations shall be called as "The Revised Regulations for the Master of Pharmacy (M. Pharm.)Degree Program - Credit Based Semester System (CBSS) of the Pharmacy Council of India, New Delhi". They shall come into effect from the Academic Year 2016-17. The regulations framed are subject to modifications from time to time by the authorities of the university.

2. Minimum qualification for admission

A Pass in the following examinations

a) B. Pharm Degree examination of an Indian university established by law in India from an institution approved by Pharmacy Council of India and has scorednot less than 55 % of the maximum marks (aggregate of 4 years of B.Pharm.)

b) Every student, selected for admission to post graduate pharmacy program in any PCI approved institution should have obtained registration with the State Pharmacy Council or should obtain the same within one month from the date of his/her admission, failing which the admission of the candidate shall be cancelled.

Note: It is mandatory to submit a migration certificate obtained from the respective university where the candidate had passed his/her qualifying degree (B.Pharm.)

3. Duration of the program

The program of study for M.Pharm. shall extend over a period of four semesters (two academic years). The curricula and syllabi for the program shall be prescribed from time to time by Phamacy Council of India, New Delhi.

4. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

5. Working days in each semester

Each semestershall consist of not less than 100 working days. The odd semesters shall be conducted from the month of June/July to November/December and the even semesters shall be conducted from the month of December/January to May/June in every calendar year.

6. Attendance and progress

A candidate is required to put in at least 80% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

7. Program/Course credit structure

As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, practical classes, seminars, assignments, etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly the credit associated with any of the other academic, co/extra- curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week/per activity.

Credit assignment

Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and a multiplier of half (1/2) for practical (laboratory) hours.Thus, for example, a theory course having four lectures per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2.

The contact hours of seminars, assignments and research work shall be treated as that of practical courses for the purpose of calculating credits. i.e., the contact hours shall be multiplied by 1/2. Similarly, the contact hours of journal club, research work presentations and discussions with the supervisor shall be considered as theory course and multiplied by 1.

Minimum credit requirements

The minimum credit points required for the award of M. Pharm. degree is 95. However based on the credit points earned by the students under the head of co-curricular activities, a student shall earn a maximum of 100 credit points. These credits are divided into Theory courses, Practical, Seminars, Assignments,Research work, Discussions with the supervisor, Journal club and Co-Curricular activities over the duration of four semesters. The credits

are distributed semester-wise as shown in Table 14. Courses generally progress in sequence, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

8. Academic work

A regular record of attendance both in Theory, Practical, Seminar, Assignment, Journal club, Discussion with the supervisor, Research work presentation and Dissertation shall be maintained by the department / teaching staff of respective courses.

9. Course of study

The specializations in M.Pharm program is given in Table 1.

Table – 1: List of M.Pharm. Specializations and their Code

S. No.	Specialization	Code
1.	Pharmaceutics	MPH
2.	Pharmaceutical Chemistry	MPC
3.	Pharmacology	MPL

The course of study for M.Pharm specializations shall include Semester wise Theory & Practical as given in Table – 2 to 11. The number of hours to be devoted to each theory and practical course in any semester shall not be less than that shown in Table – 2 to 11.

Table – 2: Course of study for M. Pharm. (Pharmaceutics)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
Semester I					
MPH101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPH102T	Drug Delivery System	4	4	4	100
MPH103T	Modern Pharmaceutics	4	4	4	100
MPH104T	Regulatory Affair	4	4	4	100
MPH105P	Pharmaceutics Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
Total		35	26	35	650
Semester II					
MPH201T	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	4	4	4	100
MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	4	4	4	100
MPH203T	Computer Aided Drug Delivery System	4	4	4	100
MPH204T	Cosmetic and Cosmeceuticals	4	4	4	100
MPH205P	Pharmaceutics Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
Total		35	26	35	650

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Table – 3: Course of study for M. Pharm. (Pharmaceutical Chemistry)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
Semester I					
MPC101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPC1012T	Advanced Organic Chemistry -I	4	4	4	100
MPC103T	Advanced Medicinal chemistry	4	4	4	100
MPC104T	Chemistry of Natural Products	4	4	4	100
MPC105P	Pharmaceutical Chemistry Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
Semester II					
MPC201T	Advanced Spectral Analysis	4	4	4	100
MPC202T	Advanced Organic Chemistry -II	4	4	4	100
MPC203T	Computer Aided Drug Design	4	4	4	100
MPC204T	Pharmaceutical Process Chemistry	4	4	4	100
MPC205P	Pharmaceutical Chemistry Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

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Table – 4: Course of study for (Pharmacology)

Course Code	Course	Credit Hours	Credit Points	Hrs./wk	Marks
Semester I					
MPL 101T	Modern Pharmaceutical Analytical Techniques	4	4	4	100
MPL 102T	Advanced Pharmacology-I	4	4	4	100
MPL 103T	Pharmacological and Toxicological Screening Methods-I	4	4	4	100
MPL 104T	Cellular and Molecular Pharmacology	4	4	4	100
MPL 105P	Pharmacology Practical I	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650
Semester II					
MPL 201T	Advanced Pharmacology II	4	4	4	100
MPL 202T	Pharmacological and Toxicological Screening Methods-II	4	4	4	100
MPL 203T	Principles of Drug Discovery	4	4	4	100
MPL 204T	Experimental Pharmacology practical- II	4	4	4	100
MPL 205P	Pharmacology Practical II	12	6	12	150
-	Seminar/Assignment	7	4	7	100
	Total	35	26	35	650

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Table – 5: Course of study for M. Pharm. III Semester
(Common for All Specializations)

Course Code	Course	Credit Hours	Credit Points
MRM 301T	Research Methodology and Biostatistics*	4	4
-	Journal club	1	1
-	Discussion / Presentation (Proposal Presentation)	2	2
-	Research Work	28	14
Total		35	21

* Non University Exam

Table – 6: Course of study for M. Pharm. IV Semester
(Common for All Specializations)

Course Code	Course	Credit Hours	Credit Points
-	Journal Club	1	1
-	Research Work	31	16
-	Discussion/Final Presentation	3	3
Total		35	20

Table – 7: Semester wise credits distribution

Semester	Credit Points
I	26
II	26
III	21
IV	20
Co-curricular Activities (Attending Conference, Scientific Presentations and Other Scholarly Activities)	Minimum=02 Maximum=07*
Total Credit Points	Minimum=95 Maximum=100*

*Credit Points for Co-curricular Activities

Table – 8: Guidelines for Awarding Credit Points for Co-curricular Activities

Name of the Activity	Maximum Credit Points Eligible / Activity
Participation in National Level Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	01
Participation in international Level Seminar/Conference/Workshop/Symposium/ Training Programs (related to the specialization of the student)	02
Academic Award/Research Award from State Level/National Agencies	01
Academic Award/Research Award from International Agencies	02
Research / Review Publication in National Journals (Indexed in Scopus / Web of Science)	01
Research / Review Publication in International Journals	

Note: International Conference: Held Outside India International Journal:

The Editorial Board Outside India
*The credit points assigned for extracurricular and or co-curricular activities shall
be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

10. Program Committee

1. The M. Pharm. programme shall have a Programme Committee constituted by the Head of the institution in consultation with all the Heads of the departments.

2. The composition of the Programme Committee shall be as follows:
A teacher at the cadre of Professor shall be the Chairperson; One Teacher from each M.Pharm specialization and four student representatives (two from each academic year), nominated by the Head of the institution.

3. Duties of the Programme Committee:
   i. Periodically reviewing the progress of the classes.
   ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
   iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.

iv. Communicating its recommendation to the Head of the institution on academic matters.
v. The Programme Committee shall meet at least twice in a semester preferably at the end of each sessionalexam and before the end semester exam.

11. Examinations/Assessments

The schemes for internal assessment and end semester examinations are givenin Table – 9.

End semester examinations

The End Semester Examinations for each theory and practical coursethrough semesters I to IVshall beconducted by the respective university except for the subject with asterix symbol (*) in table I and II for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the university.

Tables – 9 : Schemes for internal assessments and end semester
(Pharmaceutics- MPH)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
SEMESTER I								
MPH 101T	Modern Pharmaceutical Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
MPH 102T	Drug Delivery System	10	15	1 Hr	25	75	3 Hrs	100
MPH 103T	Modern Pharmaceutics	10	15	1 Hr	25	75	3 Hrs	100
MPH 104T	Regulatory Affair	10	15	1 Hr	25	75	3 Hrs	100
MPH 105P	Pharmaceutics Practical I	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650
SEMESTER II								
MPH 201T	Molecular Pharmaceutics(Nano Tech and Targeted DDS)	10	15	1 Hr	25	75	3 Hrs	100
MPH 202T	Advanced Biopharmaceutics & Pharmacokinetics	10	15	1 Hr	25	75	3 Hrs	100
MPH 203T	Computer Aided Drug Delivery System	10	15	1 Hr	25	75	3 Hrs	100
MPH	Cosmetic	10	15	1 Hr	25	75	3 Hrs	100

204T	and Cosmeceuticals							
MPH 205P	Pharmaceutics Practical I	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650

table: 10 (Pharmaceutical Chemistry-MPC)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
SEMESTER I								
MPC101T	Modern Pharmaceutical Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
MPC102T	Advanced Organic Chemistry –I	10	15	1 Hr	25	75	3 Hrs	100
MPC103T	Advanced Medicinal chemistry	10	15	1 Hr	25	75	3 Hrs	100
MPC104T	Chemistry of Natural Products	10	15	1 Hr	25	75	3 Hrs	100
MPC105P	Pharmaceutical Chemistry Practical I	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650
SEMESTER II								
MPC201T	Advanced Spectral Analysis	10	15	1 Hr	25	75	3 Hrs	100
MPC202T	Advanced Organic Chemistry –II	10	15	1 Hr	25	75	3 Hrs	100
MPC203T	Computer Aided Drug Design	10	15	1 Hr	25	75	3 Hrs	100
MPC204T	Pharmaceutical Process Chemistry	10	15	1 Hr	25	75	3 Hrs	100
MPC205P	Pharmaceutic	20	30	6 Hrs	50	100	6	150

	al Chemistry Practical II						Hrs	
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650

	Assurance							
MPA204T	Herbal and Cosmetic analysis	10	15	1 Hr	25	75	3 Hrs	100
MPA205P	Pharmaceutical Analysis-II	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650

Tables – 11: Schemes for internal assessments and end semester examinations (Pharmacology-MPL)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
SEMESTER I								
MPL101T	Modern Pharmaceutical Analytical Techniques	10	15	1 Hr	25	75	3 Hrs	100
MPL102T	Advanced Pharmacology-I	10	15	1 Hr	25	75	3 Hrs	100
MPL103T	Pharmacological and Toxicological Screening Methods–I	10	15	1 Hr	25	75	3 Hrs	100
MPL104T	Cellular and Molecular Pharmacology	10	15	1 Hr	25	75	3 Hrs	100
MPL105P	Experimental Pharmacology – I	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650
SEMESTER II								
MPL201T	Advanced Pharmacology II	10	15	1 Hr	25	75	3 Hrs	100
MPL102T	Pharmacological and Toxicological Screening Methods–II	10	15	1 Hr	25	75	3 Hrs	100
MPL203T	Principles of Drug Discovery	10	15	1 Hr	25	75	3 Hrs	100
MPL204T	Clinical research and pharmacovigilance	10	15	1 Hr	25	75	3 Hrs	100
MPL205P	Experimental Pharmacology – II	20	30	6 Hrs	50	100	6 Hrs	150
-	Seminar /Assignment	-	-	-	-	-	-	100
Total								650

Tables – 12: Schemes for internal assessments and end semester examinations(Semester III& IV)

Course Code	Course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
SEMESTER III								
MRM3011T	Research Methodology and Biostatistics*	10	15	1 Hr	25	75	3 Hrs	100
-	Journal club	-	-	-	25	-	-	25
-	Discussion / Presentation (Proposal Presentation)	-	-	-	50	-	-	50
-	Research work*	-	-	-	-	350	1 Hr	350
Total								525
SEMESTER IV								
-	Journal club	-	-	-	25	-	-	25
-	Discussion / Presentation (Proposal Presentation)	-	-	-	75	-	-	75
-	Research work and Colloquium	-	-	-	-	400	1 Hr	400
Total								500

*Non University Examination

Internal assessment: Continuous mode

The marks allocated for Continuous mode of Internal Assessment shall be awarded as per the scheme given below.

Table – 13: Scheme for awarding internal assessment: Continuous mode

Theory	
Criteria	Maximum Marks
Attendance (Refer Table – 28)	8
Student – Teacher interaction	2
Total	10
Practical	
Attendance (Refer Table – 28	10
Based on Practical Records, Regular viva voce, etc.	10
Total	20

Table – 14: Guidelines for the allotment of marks for attendance

Percentage of Attendance	Theory	Practical
95 – 100	8	10
90 – 94	6	7.5
85 – 89	4	5
80 – 84	2	2.5
Less than 80	0	0

11.2.1. Sessional Exams

Two sessional exams shall be conducted for each theory / practical course as per the schedule fixed by the college(s). The scheme of question paper for theory and practical sessional examinations is given in the table. The average marks of two sessional exams shall be computed for internal assessment as per the requirements given in tables.

12. Promotion and award of grades

A student shall be declared PASS and eligible for getting grade in a course of M.Pharm.programme if he/she secures at least 50% marks in that particular courseincluding internal assessment.

13. Carry forward of marks

In case a student fails to secure the minimum 50% in any Theory or Practical course as specified in 12, then he/she shall reappear for the end semester examination of that course. However his/her marks of the Internal Assessment shall be carried over and he/she shall be entitled for grade obtained by him/her on passing.

14. Improvement of internal assessment

A student shall have the opportunity to improve his/her performance only once in the sessional exam component of the internal assessment. The re-conduct of the sessional exam shall be completed before the commencement of next end semester theory examinations.

15. Reexamination of end semester examinations

Reexamination of end semester examination shall be conducted as per the schedule given in table 15. The exact dates of examinations shall be notified from time to time.

Table – 15: Tentative schedule of end semester examinations

Semester	For Regular Candidates	For Failed Candidates
I and III	November / December	May / June
II and IV	May / June	November / December

16. Allowed to keep terms (ATKT):

No student shall be admitted to any examination unless he/she fulfills the norms given in 6. ATKT rules are applicable as follows:

A student shall be eligible to carry forward all the courses of I and IIsemesters till the III semester examinations. However, he/she shall not be eligible to attend the courses of IV semester until all the courses of I, II and III semesters are successfully completed.

A student shall be eligible to get his/her CGPA upon successful completion of the courses of I to IV semesters within the stipulated time period as per the norms.

Note: Grade AB should be considered as failed and treated as one head for deciding ATKT. Such rules are also applicable for those students who fail to register for examination(s) of any course in any semester.

17. Grading of performances

Letter grades and grade points allocations:

Based on the performances, each student shall be awarded a final letter grade at the end of the semester for each course.The letter grades and their corresponding grade points are given in Table – 16.

Table – 16: Letter grades and grade points equivalent to Percentage of marks and performances

Percentage of Marks Obtained	Letter Grade	Grade Point	Performance
90.00 – 100	O	10	Outstanding
80.00 – 89.99	A	9	Excellent
70.00 – 79.99	B	8	Good
60.00 – 69.99	C	7	Fair
50.00 – 59.99	D	6	Average
Less than 50	F	0	Fail
Absent	AB	0	Fail

A learner who remains absent for any end semester examination shall be assigned a letter grade of AB and a corresponding grade point of zero. He/she should reappear for the said evaluation/examination in due course.

18. The Semester grade point average (SGPA)

The performance of a student in a semester is indicated by a number called 'Semester Grade Point Average' (SGPA). The SGPA is the weighted average of the grade points obtained in all the courses by the student during the semester. For example, if a student takes five courses (Theory/Practical) in a semester with credits C1, C2, C3 and C4 and the student's grade points in these courses

are G1, G2, G3 and G4, respectively, and then students' SGPA is equal to:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4G_4}{C_1 + C_2 + C_3 + C_4}$$

The SGPA is calculated to two decimal points. It should be noted that, the SGPA for any semester shall take into consideration the F and ABS grade awarded in that semester. For example if a learner has a F or ABS grade in course 4, the SGPA shall then be computed as:

$$\text{SGPA} = \frac{C_1G_1 + C_2G_2 + C_3G_3 + C_4* \text{ ZERO}}{C_1 + C_2 + C_3 + C_4}$$

19. Cumulative Grade Point Average (CGPA)

The CGPA is calculated with the SGPA of all the IV semesters to two decimal points and is indicated in final grade report card/final transcript showing the grades of all IV semesters and their courses. The CGPA shall reflect the failed status in case of F grade(s), till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA

shall only reflect the new grade and not the fail grades earned earlier. The CGPA is calculated as:

$$CGPA = \frac{C_1S_1 + C_2S_2 + C_3S_3 + C_4S_4}{C_1 + C_2 + C_3 + C_4}$$

where $C_1, C_2, C_3, \ldots$ is the total number of credits for semester I,II,III,…. and $S_1, S_2, S_3, \ldots$ is the SGPA of semester I,II,III,….. .

20. Declaration of class

The class shall be awarded on the basis of CGPA as follows: First Class with
Distinction = CGPA of. 7.50 and above
First Class   = CGPA of 6.00 to 7.49
Second Class   = CGPA of 5.00 to 5.99

21. Project work

All the students shall undertake a project under the supervision of a teacher in Semester III to IV and submit a report. 4 copies of the project report shall be submitted (typed & bound copy not less than 75 pages).

The internal and external examiner appointed by the University shall evaluate the project at the time of the Practical examinations of other semester(s). The projects shall be evaluated as per the criteria given below.

Evaluation of Dissertation Book:

Objective(s) of the work done	50 Marks
Methodology adopted	150 Marks
Results and Discussions	250 Marks
Conclusions and Outcomes	50 Marks
Total	**500 Marks**

Evaluation of Presentation:

Presentation of work	100 Marks
Communication skills	50 Marks
Question and answer skills	100 Marks
Total	**250 Marks**

22. Award of Ranks

Ranks and Medals shall be awarded on the basis of final CGPA. However, candidates who fail in one or more courses during the M.Pharm program shall not be eligible for award of ranks. Moreover, the candidates should have completed the M. Pharm program in minimum prescribed number of years, (two years) for the award of Ranks.

23. Award of degree

Candidates who fulfill the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

24. Duration for completion of the program of study

The duration for the completion of the program shall be fixed as double the actual duration of the program and the students have to pass within the said period, otherwise they have to get fresh Registration.

25. Revaluation I Retotaling of answer papers

There is no provision for revaluation of the answer papers in any examination. However, the candidates can apply for retotaling by paying prescribed fee.

26. Re-admission after break of study

Candidate who seeks re-admission to the program after break of study has to get the approval from the university by paying a condonation fee

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School Of Pharmacy

Ordinances, Regulations & Syllabus

For

Bachelor of Pharmacy (B.Pharm) 4 Year Programme Semester Pattern
(w.e.f.session2013-14)

Approved by Pharmacy Council of India and adopted in the year 2013, 1st Meeting, Board of Studies.

[Frame under Regulation 6,7 & 8 of the Bachelor of Pharmacy (B. Pharm)]

CHAPTER- I: REGULATIONS

1. Short Title and Commencement

These regulations shall be called as "The Revised Regulations for the B. Pharm. Degree Program (CBCS)of the Pharmacy Council of India, New Delhi". They shall come into effect from the Academic Year 2016-17. The regulations framed are subject to modifications from time to time by Pharmacy Council of India.

2. Minimum qualification for admission

First year B. Pharm:

Candidate shall have passed 10+2 examination conducted by the respective state/central government authorities recognized as equivalent to 10+2 examination by the Association of Indian Universities (AIU) with English as one of the subjects and Physics, Chemistry, Mathematics (P.C.M) and or Biology (P.C.B / P.C.M.B.) as optional subjects individually. Any other qualification approved by the Pharmacy Council of India as equivalent to any of the above examinations.

2.2. B. Pharm lateral entry (to third semester):

A pass in D. Pharm. course from an institution approved by the Pharmacy Council of India under section 12 of the Pharmacy Act.

3. Duration of the program

The course of study for B.Pharm shall extend over a period of eight semesters (four academic years) and six semesters (three academic years) for lateral entry students. The curricula and syllabi for the program shall be prescribed from time to time by Pharmacy Council of India, New Delhi.

4. Medium of instruction and examinations

Medium of instruction and examination shall be in English.

5. Working days in each semester

Each semester shall consist of not less than 100 working days. The odd semesters shall be conducted from the month of June/July to November/December and the even semesters shall be conducted from December/January to May/June in every calendar year.

6. Attendance and progress

A candidate is required to put in at least 80% attendance in individual courses considering theory and practical separately. The candidate shall complete the prescribed course satisfactorily to be eligible to appear for the respective examinations.

7. Program/Course credit structure

As per the philosophy of Credit Based Semester System, certain quantum of academic work viz. theory classes, tutorial hours, practical classes, etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other academic, co/extra-curricular activities is dependent upon the quantum of work expected to be put in for each of these activities per week.

Credit assignment

Theory and Laboratory courses

Courses are broadly classified as Theory and Practical. Theory courses consist of lecture (L) and /or tutorial (T) hours, and Practical (P) courses consist of hours spent in the laboratory. Credits (C) for a course is dependent on the number of hours of instruction per week in that course, and is obtained by using a multiplier of one (1) for lecture and tutorial hours, and a multiplier of half (1/2) for practical (laboratory) hours. Thus, for example, a theory course having three lectures and one tutorial per week throughout the semester carries a credit of 4. Similarly, a practical having four laboratory hours per week throughout semester carries a credit of 2.

Minimum credit requirements

The minimum credit points required for award of a B. Pharm. degree is 208. These credits are divided into Theory courses, Tutorials, Practical, Practice School and Projectover the duration of eight semesters. The credits are distributed semester-wise as shown in Table IX. Courses generally progress in sequences, building competencies and their positioning indicates certain academic maturity on the part of the learners. Learners are expected to follow the semester-wise schedule of courses given in the syllabus.

The lateral entry students shall get 52 credit points transferred from their D. Pharm program. Such students shall take up additional remedial courses of 'Communication Skills' (Theory and Practical) and 'Computer Applications in Pharmacy' (Theory and Practical) equivalent to 3 and 4 credit points respectively, a total of 7 credit points to attain 59 credit points, the maximum of I and II semesters.

8. Academic work

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

9. Course of study

The course of study for B. Pharm shall include Semester Wise Theory & Practical as given in Table – I to VIII. The number of hours to be devoted to each theory, tutorial and practical course in any semester shall not be less than that shown in Table – I to VIII.

Table-I: Course of study for semester I

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP101T	Human Anatomy and Physiology I–Theory	3	1	4
BP102T	Pharmaceutical Analysis I–Theory	3	1	4
BP103T	Pharmaceutics I–Theory	3	1	4
BP104T	Pharmaceutical Inorganic Chemistry–Theory	3	1	4
BP105T/ BP105TA/ BP105TB/ BP105TC	Communication skills–Theory*/English Grammar and Creative Writing/Speaking and Presentation Skills/ Life Management and Soft Skills	2	-	2
BP106RBT BP106RMT	Remedial Biology/ Remedial Mathematics–Theory*	2	-	2
BP107P	Human Anatomy and Physiology–Practical	4	-	2
BP108P	Pharmaceutical Analysis I–Practical	4	-	2
BP109P	Pharmaceutics I–Practical	4	-	2
BP110P	Pharmaceutical Inorganic Chemistry–Practical	4	-	2
BP111P/ BP111PA/ BP111PB/ BP111PC	Communication skills–Practical*/ English Grammar and Creative Writing/Speaking and Presentation Skills/ Life Management and Soft Skills	2	-	1
BP112RBP	Remedial Biology–Practical*	2	-	1
	Total	**32/34$/36#**	**4**	**27/29$/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.

* Non University Examination (NUE)

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Table-II: Course of study for semester II

Course Code	Name of the course	No. of hours	Tutorial	Credit points
BP201T	Human Anatomy and Physiology II – Theory	3	1	4
BP202T	Pharmaceutical Organic Chemistry I – Theory	3	1	4
BP203T	Biochemistry – Theory	3	1	4
BP204T	Pathophysiology – Theory	3	1	4
BP205T	Computer Applications in Pharmacy – Theory *	3	-	3
BP206T	Environmental sciences – Theory *	3	-	3
BP207P	Human Anatomy and Physiology II –Practical	4	-	2
BP208P	Pharmaceutical Organic Chemistry I– Practical	4	-	2
BP209P	Biochemistry – Practical	4	-	2
BP210P	Computer Applications in Pharmacy – Practical*	2	-	1
	Total	**32**	**4**	**29**

*Non University Examination (NUE)

Table-III: Course of study for semester III

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP301T	Pharmaceutical Organic Chemistry II – Theory	3	1	4
BP302T	Physical Pharmaceutics I – Theory	3	1	4
BP303T	Pharmaceutical Microbiology – Theory	3	1	4
BP304T	Pharmaceutical Engineering – Theory	3	1	4
BP305P	Pharmaceutical Organic Chemistry II – Practical	4	-	2
BP306P	Physical Pharmaceutics I – Practical	4	-	2
BP307P	Pharmaceutical Microbiology – Practical	4	-	2
BP 308P	Pharmaceutical Engineering –Practical	4	-	2
	Total	**28**	**4**	**24**

Table-IV: Course of study for semester IV

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP401T	Pharmaceutical Organic Chemistry III– Theory	3	1	4
BP402T	Medicinal Chemistry I – Theory	3	1	4
BP403T	Physical Pharmaceutics II – Theory	3	1	4
BP404T	Pharmacology I – Theory	3	1	4
BP405T	Pharmacognosy and Phytochemistry I– Theory	3	1	4
BP406P	Medicinal Chemistry I – Practical	4	-	2
BP407P	Physical Pharmaceutics II – Practical	4		2
BP408P	Pharmacology I – Practical	4	-	2
BP409P	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
BP501T	Medicinal Chemistry II – Theory	3	1	4
BP502T	Industrial PharmacyI– Theory	3	1	4
BP503T	Pharmacology II – Theory	3	1	4
BP504T	Pharmacognosy and Phytochemistry II– Theory	3	1	4
BP505T	Pharmaceutical Jurisprudence – Theory	3	1	4
BP506P	Industrial PharmacyI – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
	Total	**27**	**5**	**26**

Table-VI: Course of study for semester VI

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP601T	Medicinal Chemistry III – Theory	3	1	4
BP602T	Pharmacology III – Theory	3	1	4
BP603T	Herbal Drug Technology – Theory	3	1	4
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	3	1	4
BP605T	Pharmaceutical Biotechnology – Theory	3	1	4
BP606T	Quality Assurance –Theory	3	1	4
BP607P	Medicinal chemistry III – Practical	4	-	2
BP608P	Pharmacology III – Practical	4	-	2
BP609P	Herbal Drug Technology – Practical	4	-	2
	Total	**30**	**6**	**30**

Table-VII: Course of study for semester VII

Course code	Name of the course	No. of hours	Tutorial	Credit Points
BP701T	Instrumental Methods of Analysis–Theory	3	1	4
BP702T	Industrial Pharmacy II–Theory	3	1	4
BP703T	Pharmacy Practice–Theory	3	1	4
BP704T	Novel Drug Delivery System –Theory	3	1	4
BP705P	Instrumental Methods of Analysis–Practical	4	-	2
BP706PS/ BP706PSA/ BP706PSB/ BP706PSC	Practice School*/Skill Enhancement Course :Practical (Qualifying course) Data Analysis / Computer Programming / Python Programming.	12	-	6
	Total	**28**	**5**	**24**

* Non University Examination (NUE)

Table-VIII: Course of study for semester VIII

Course code	Name of the course	No. of hours	Tutorial	Credit points
BP801T	Biostatistics and Research Methodology	3	1	4
BP802T	Social and Preventive Pharmacy	3	1	4
BP803ET	Pharma Marketing Management			
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals	3 + 3 =6	1 + 1 = 2	4 + 4 =8
BP807ET	Computer Aided Drug Design			
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology			
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work	12	-	6
	Total	**24**	**4**	**22**

Table-IX: Semester wise credits distribution

Semester	Credit Points
I	**27/29$/30#**
II	29
III	26
IV	28
V	26
VI	26
VII	24
VIII	22
Extracurricular/ Co curricular activities	01*
Total credit points for the program	**209/211$/212#**

* The credit points assigned for extracurricular and or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University. The criteria to acquire this credit point shall be defined by the colleges from time to time.

$Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course**.**

#Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course**.**

10. Program Committee

1. The B. Pharm. program shall have a Program Committee constituted by the Head of the institution in consultation with all the Heads of the departments.

2. The composition of the Program Committee shall be as follows:

   A senior teacher shall be the Chairperson; One Teacher from each department handling B.Pharm courses; and four student representatives of the program (one from each academic year), nominated by the Head of the institution.

3. Duties of the Program Committee:

   i. Periodically reviewing the progress of the classes.
   ii. Discussing the problems concerning curriculum, syllabus and the conduct of classes.
   iii. Discussing with the course teachers on the nature and scope of assessment for the course and the same shall be announced to the students at the beginning of respective semesters.
   iv. Communicating its recommendation to the Head of the institution on academic matters.
   v. The Program Committee shall meet at least thrice in a semester preferably at the end of each Sessionalexam (Internal Assessment) and before the end semester exam.

11. Examinations/Assessments
The scheme for internal assessment and end semester examinations is given in Table – X.

End semester examinations
The End Semester Examinations for each theory and practical coursethrough semesters I to VIII shall beconducted by the university except for the subjects with asterix symbol (*) in table I and II for which examinations shall be conducted by the subject experts at college level and the marks/grades shall be submitted to the university.

School of Biological Engineering & Sciences

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Biological Engineering & Sciences

Ordinances, Regulations & Syllabus

For

Master of Science in Microbiology (M.Sc.) Two Year Programme Semester Pattern
(w.e.f. session 2017-18)

Revised and approved in the year 2020(13th meeting Board of Studies)

(Scheme & syllabus from 2020-2024)

PEOs: Program Educational Objectives POs: Program Outcomes PSOs: Program Specific Outcomes

Name of the Department: Department of Microbiology

Name of the Program: M.Sc. Microbiology

Duration of the degree: 2 Years

M. Sc. (Microbiology) course combines the concepts of biology and chemistry to understand living things and their relationship with the ecosystem. The course covers the study of microorganisms and their effect on human life. M.Sc. in Microbiology is an advanced course that helps students understand the microbes such as virus, bacteria, fungi, algae etc. at a deeper level. Students also learn the role of theses microorganism in waste management and the production of fermented foods. Throughout M.Sc. Microbiology course, students study the detailed microbiology topics and interdisciplinary subjects.

M.Sc. Microbiology has a significant role in pharmaceuticals, agriculture, brewery and manufacturing of commercial products. The practical, research-based project and laboratory work throughout the M.Sc. Microbiology helps candidates excel at the workplace with required skills and knowledge.

Program Educational Objectives (PEOs)

PEO 1: The objective of the Master's Program in Microbiology is to equip the students to gain bimolecular knowledge and analytical skills at an advanced level.

PEO 2: The program emphasizes to apply knowledge acquired about prokaryotic and eukaryotic cellular processes, interaction of microorganisms among themselves, with physical and chemical agents and higher order organisms in environment and biological systems to various conditions.

PEO 3: The laboratory training in addition to theory is included so that the students will acquire the skills to qualify for a broad range of positions in research, industry, consultancy, education and public administration, or for further education in a doctoral program.

PEO 4: Students will be able to address broad range of fields including biopolymer chemistry, marine biochemistry, environmental biotechnology, food science, microbiology, microbial genetics, molecular biology and systems biology.

Program Specific Outcomes (PSOs)

PSO 1: Acquires and demonstrates competency in laboratory safety. Develops routine and specialized microbiological laboratory skills applicable to research, hospitals and industries.

PSO 2: Applies statistical and bioinformatics tools for interpretation of biological data and gains expertise in Computational Biology.

PSO 3: Acquires knowledge of structural and enzymatic properties of microbes and fermentation engineering, to develop human / environment friendly products or processes.

PSO 4: Gets familiarized with principles and techniques of various basic and analytical instruments used in laboratories.

PSO 5: Recognizes the importance of IPR and Patenting. Gain Entrepreneurial skills to initiate Startup.

PSO 6: Gets trained in bimolecular mechanisms involved in life processes, health and diseases.

PSO 7: Gains proficiency in related disciplines such as Molecular Biology, Pharmaceutical Sciences, Nano biotechnology and Immunology.

PSO 8: Explores the life forms at cellular, molecular and nano levels. Understands amazing properties of microbial world and appreciates the beauty of microbial life forms.

PSO 9: Assesses the role of microbes in improving soil quality and agricultural output through sustainable microbiological applications.

PSO 10: Work as Health care professionals in the fields of laboratory management, hospital and community services, in development & preparation of Study material for visually challenged.

Program Outcomes Objectives (POOs)

The Masters in Microbiology Program will address the increasing need for skilled scientific manpower with an understanding of research ethics involving microorganisms to contribute to application, advancement and impartment of knowledge in the field of microbiology and molecular biology globally. The laboratory training will empower them to prepare for careers in broad range fields. The M.Sc. Microbiology student will have:

POO 1: State of art knowledge about various methodological and analytic approaches that are used within thespecialization.

POO 2: Knowledge of the leading edge in a chosen specialized area of Microbiology, based on own research experience from a master's project and international literature.

POO 3: Can compete in national level competitive exams such as NET-JRF or GATE or International exams such as GRE-TOEFEL and can pursue career in higher studies.

POO 4: In-depth knowledge in the structure of a repertoire of microorganisms, metabolism in the cell, knowledge of the concepts of molecular genetics and biosynthesis of proteins, enzymology, physiology, microbial pathogenicity, environmental and agricultural microbiology, genetic engineering, bioengineering and a good theoretical and practical insight into methods used to obtain this knowledge.

POO 5: Demonstrate practical skills in the use of tools, technologies and methods common to microbiology, and apply the scientific method and hypothesis testing in the design and execution of experiments.

POO 6: Develop ability to independently carry out a complete scientific work process, including the understanding of theoretical background, hypothesis generation, collection and analysis of data, and interpretation and presentation of results.

POO 7: Has high competence and multidisciplinary project experience within selected topics related to microbiology and ability to contribute in a multidisciplinary team.

POO 8: Is capable to evaluate methods and results within the field of specialization critically.

POO 9: Is able to evaluate and apply relevant theory, methods and analytic approaches within the specialized field of microbiology, including statistical methods.

POO 10: Can assess and predict the technological, ethical and social effects of their own work /disciplines and of microbiology.

POO 11: Acknowledges health, safety and environment (HSE) issues in handling chemicals and biological materials; understands the environmental impacts associated with the activity; performs risk assessments and is familiar with safety instructions in his/her subject area.

POO 12: Can communicate scientific results to the general public and experts by writing well-structured reports and contributions for scientific publications and posters, and by oral presentations.

Course Components of Academic Programme

M.Sc. (Microbiology)

Minimum Duration   : 4 Semesters (2 Years)

Maximum Duration   :   6 Semesters (3 Years)

Total Number of Credits : 93 Credits

Course Components		Credits
1.	**Compulsory Course**	
I.	Foundation Course (FC)	00
II.	Core Course (CC)	61
2.	**Elective Course**	
I.	Departmental Electives (DE)	06
II.	Interdepartmental Electives (IE)	00
3.	**Discipline-Centric Ability Enhancement Course**	
I.	Seminar (SM)	03
II.	Project (PJ)/ Dissertation (DS)	16
III.	Skill (SK) and Ability Enhancement Course (AEC)	04
IV.	Comprehensive (CM)	00
4.	**General Course**	
I.	Human Values, Health Care and Professional Ethics (HP)	00
II.	Healthy Living and Fitness (HF)	00
III.	Disaster Management (DM)	00
IV.	General Proficiency (GP)	03
5.	**Audit Course**	

Requirement of Awards of Degree: - Total Credits: - 93; CGPA>=4.5 and any other conditions as per regulation and ordinances.

Summary Sheet

M.Sc. (Microbiology)

Semester	Credit				Total
	CC	**DCAEC (AEC/SK/SM/PJ)**	**DE**	**GC**	
I	25	3	0	1	29
II	21	3	0	1	25
III	15	1	6	1	23
IV	00	16	0	0	17
Total	**61**	**23**	**6**	**3**	**93**

Core Courses: CC
Discipline-Centric Ability Enhancement Course: DCAEC
Ability Enhancement Course: AEC
Skill Course: SEC
Departmental Electives: DE
General Course: GC

M.Sc. (Microbiology)
PROGRAMME STRUCTURE (2020-21)

FIRST SEMESTER

Course Code	Course Title	Category	(L)	(T)	(P)	Credits
Core Courses						
MMB-101/ **MMB-101a/ MMB-101b/ MMB-101c**	Cell & Developmental Biology/Human Pathology/Cytology/Toxicology & Forensic Science	CC	3	0	0	3
MMB-102/ **MMB-102a/ MMB-102b/ MMB-102c**	Biochemistry & Enzymology/Elements of Biochemistry/Concept in Medicinal Chemistry & Drug Development/Biophysics	CC	3	0	0	3
MMB-103	Bacteriology	CC	3	0	0	3
MMB-104	Virology	CC	3	0	0	3
MMB-105	Computer Applications & Biostatistics	CC	3	0	0	3
Discipline-Centric Ability Enhancement Course						
AEC-101/ **AEC101a/ AEC101b/ AEC-101c**	Professional communication/Public Speaking-I/Effective Writing Skills-I/English Grammar-I	AEC	2	0	0	2
SM-101/ **SM-101 a**	Seminar & Research Orientation/Research Ethics-I	SM	0	0	1	1
General Course						
GP-101/ **GP-101a/ GP-101b/ GP-101c**	General Proficiency/Entrepreneurship development & Business communication-I/Human Values & Moral Ethics-I/Life Management-I	GP	0	0	1	1
LABS						
MMB-151	Cell & Developmental Biology Lab	CC	0	0	2	2
MMB-152	Biochemistry & Enzymology Lab	CC	0	0	2	2
MMB-153	Bacteriology Lab	CC	0	0	2	2
MMB-154	Virology Lab	CC	0	0	2	2
MMB-155	Computer Applications & Biostatistics Lab	CC	0	0	2	2
	TOTAL					**24**

SECOND SEMESTER

Course Code	Course Title	Category	(L)	(T)	(P)	Credits
Core Courses						
MMB-201	Immunology & Immuno-technology	CC	3	0	0	3
MMB-202	Molecular Biology & Recombinant DNA Technology	CC	3	0	0	3
MMB-203	Mycology & Phycology	CC	3	0	0	3
MMB-204	IPR, Biosafety & Bioethics	CC	3	0	0	3
MMB-205	Bioinstrumentation Techniques	CC	3	0	0	3
Discipline-Centric Ability Enhancement Course						
AEC-201/ **AEC-201a/ AEC-201 b/ AEC-201 c**	Career Skills/Public Speaking-II/Effective Writing Skills-II/English Grammar-II	SK	2	0	0	2

Course Code	Course Title	Category	(L)	(T)	(P)	Credits
SM-201/ **SM-201 a**	Seminar & Research Orientation/Research Ethics-II	SM	0	0	1	1
General Course						
GP-201/ **GP-201a/ GP-201b/ GP-201c/ GP-201d**	General Proficiency/Entreprenuership development & Bussiness communication-II/Human Values & Moral Ethics-II/Life Management-II/Personality Development-II	GP	0	0	1	1
LABS						
MMB-251	Immunology & Immunotechnology Lab	CC	0	0	2	2
MMB-252	Molecular Biology & Recombinant DNA Technology Lab	CC	0	0	2	2
MMB-253	Mycology & Phycology Lab	CC	0	0	2	2
	TOTAL					**29**

THIRD SEMESTER

Course Code	Course Title	Category	(L)	(T)	(P)	Credits
Core Courses						
MMB-301	Microbial Genetics	CC	3	0	0	3
MMB-302	Medical Microbiology	CC	3	0	0	3
MMB-303	Bioinformatics	CC	3	0	0	3
Departmental Electives (DE) (Select any one of the following from Elective-I and Elective-II)						
Elective-I						
MMB-304 a	Environmental Microbiology	DE	3	0	0	3
MMB-304 b/ MMB-304 c/ MMB-304 d	Industrial Microbiology/Watershed and Wastland Managemant/Biochemical Engineering	DE	3	0	0	3
Elective-II						
MMB-305 a	Agriculture Microbiology	DE	3	0	0	3
MMB-305 b/ **MMB-305 c/ MMB-305 d**	Food Microbiology/Agricultural Journalism/Poultry Production & Management	DE	3	0	0	3
Discipline-Centric Ability Enhancement Course						
SM-301	Seminar & Research Orientation/Research Methodology	SM	0	0	1	1
General Course						
GP-301/ **GP-301a/ GP-301b/ GP-301c/ GP-301d**	General Proficiency/Entrepreneurship development & Business communication-III/Human Values & Moral Ethics-III/Life Management-III/Personality Development-III	GP	0	0	1	1
LABS						
MMB-351	Microbial Genetics Lab	CC	0	0	2	2
MMB-352	Medical Microbiology Lab	CC	0	0	2	2
MMB-353	Bioinformatics Lab	CC	0	0	2	2
	TOTAL					**23**

FOURTH SEMESTER

Course Code	Course Title	Category	(L)	(T)	(P)	Credits
Discipline-Centric Ability Enhancement Course						
MMB-401	Project/Dissertation	PJ	0	0	16	16
	TOTAL					**16**

Dissertation
Note: Students must submit their dissertation report immediately on return from summer vacation in

June /July and the same would be evaluated for 16 credit units, which would be included in the Fourth Semester marks.

Examination Scheme:

Components	Internal Assessment			External Evaluation
	Attendance	**Class Test**	**Assignment/ Project/Seminar/Quiz**	
Weightage (%)	10	20	10	60

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Biological Engineering and Sciences

Ordinances, Regulations & Syllabus

For

Bachelor of Science (B.Sc.) Three Year Programme

Semester Pattern
(w.e.f. session 2017-18)

Revised and approved in the year 2020 (13th meeting of Board of Studies)

(Scheme & syllabus from 2020-2024)

PEOs: Program Educational Objectives POs: Program Outcomes PSOs: Program Specific Outcomes

Name of the Department: Department of Microbiology

Name of the Program: B.Sc. Microbiology

Duration of the degree: 3 Years

Microbiology programme endeavors to instill in students the skills to identify individual microbial species, use aseptic techniques to grow them in pure culture, safely handle and examine them by microbiological methods. The knowledge of microbiology will enable the students to improve the quality of human lives in relation to environment, fighting disease and to exploit microbes in the production of food. Microbiology plays a key role in genetic engineering and other modern biotechnologies such as antibiotic production and the exploitation of new sources of food and energy. The regimens for this program are specifically designed to allow students to fulfill below program educational objectives:

Program Educational Objectives (PEOs)

PEO 1: The graduates will learn the importance of microorganisms in environment, brewing, food processing and preservation, pharmaceuticals and biotechnology industries.

PEO 2: The graduates will be provided with understanding of healthcare systems especially in pathological, immunological and environmental monitoring laboratories.

PEO 3: The graduates will demonstrate the skills necessary to understand and apply scientific concepts and reasoning, including the analysis and interpretation of various types of data.

Program Specific Outcomes (PSOs)

Students who graduate with a Bachelor of Science in Microbiology will

PSO 1: Acquire knowledge on fundamentals of Microbiology.

PSO 2: Understand details of bacterial, fungal, algal and viral morphology and physiology.

PSO 3: Competently be able to cultivate and characterize bacterial and fungal forms.

PSO 4: Grasp the fundamental concepts of immunity and the contribution of organs and cells in the development of immune response.

PSO 5: Gain insight into the various aspects of microbial genetics.

PSO 6: Be proficient on cloning vectors and rDNA technology.

PSO 7: Assimilate technical skills on microbial genetics and molecular biology.

PSO 8: Realize the application oriented aspects of Microbiology.

PSO 9: Understand the concepts and development of microbial diseases in animals & plants.

PSO 10: Realize the principles of prevention and treatment of microbial diseases.

Program Outcomes Objectives (POOs)

Upon completion of B.Sc. Microbiology programme, the students will be able to:

POO 1: demonstrate advanced knowledge and understand the central facts and concepts of microbiology.

POO 2: acquire knowledge and understanding of organism biology and genetics, evolution, molecular biology and basic biological chemistry.

POO 3: instill the intellectual skills to analyze and solve biology-related problem, formulate and test hypothesis using experimental design.

POO 4: demonstrate an understanding of professional ethics in science and of the principles that can guide ethical decision-making in biological controversies.

POO 5: explore the scientific literature effectively and use computational tools.

POO 6: communicate ideas and principles effectively through oral presentations, computer based tools and writtn reports.

POO 7: manage resources, time and work independently as well as in multi-disciplinary team towards a common goal/outcome.

Course Components of Academic Programme

B.Sc. (Microbiology)

Minimum Duration   :   6 Semesters (3 Years)

Maximum Duration   :   8 Semesters (4 Years)

Total Number of Credits   :   149 Credits

	Course Components	Credits
1.	**Compulsory Course**	
I.	Foundation Course (FC)	00
II.	Core Course (CC)	86
2.	**Elective Course**	
I.	Departmental Electives (GE, DE)	34
II.	Interdepartmental Electives (IE)	04
3.	**Discipline-Centric Ability Enhancement Course**	
I.	Seminar (SM)	05
II.	Project (PJ)/ Dissertation (DS)	06
III.	Skill (SEC) and Ability Enhancement Course (AEC)	08
IV.	Comprehensive (CM)	00
4.	**General Course**	
I.	Human Values, Health Care and Professional Ethics (HP)	00
II.	Healthy Living and Fitness (HF)	00
III.	Disaster Management (DM)	00
IV.	General Proficiency (GP)	06
5.	**Audit Course**	

Requirement of Awards of Degree: - Total Credits: - 149; CGPA>=4.5 and any other conditions as per regulation and ordinances.

Summary Sheet B.Sc.

(Microbiology)

Semester	Credit				Total
	CC	DCAEC (AEC/SK/SM/PJ)	DE/IE	GC	
I	12	03	08	01	24
II	12	03	06	01	22
III	18	03	04	01	26
IV	18	03	04	01	26
V	20	01	04	01	26
VI	06	06	12	01	25
Total	**86**	**19**	**38**	**06**	**149**

Core Courses: CC
Discipline-Centric Ability Enhancement Course: DCAEC Ability
Enhancement Course: AEC
Skill Course: SEC Departmental
Electives: DE General Course: GC
Interdepartmental Electives: IE

B.Sc. (Microbiology)
PROGRAMME STRUCTURE

FIRST SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits
BMB-101 / BMB-101 a/ BMB-101 b	Cell Biology/ Introductory Biology /Fundamentals of Biology	CC	3	1	0	4
BMB-102	Inorganic & Physical Chemistry	CC	3	1	0	4
BMB-103	Computer Fundamentals	GE	2	0	0	2
BMB-104	Ecology & Environment Management	GE	3	1	0	4
PC-101/ PC-101 a/ PC-101 b	Professional Communication/ Personality Development/Personal Grooming	AEC	2	0	0	2
BMB-151	Cell Biology Lab	CC	0	0	2	2
BMB-152	Inorganic & Physical Chemistry Lab	CC	0	0	2	2
BMB-153	Computer Fundamentals Lab	GE	0	0	2	2
SM-101/ SM-101 a	Seminar/Ethics of Research	SM	0	0	1	1
GP-101 / GP-101 a/ GP-101 b	General Proficiency-I/ Physical Education & Yoga/Health & Nutrition	GP	0	0	1	1
	TOTAL					24

SECOND SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits
BMB-201/ BMB-201 a/ BMB-201 b	Organic & Analytical Chemistry/Observational Chemistry/Basic & Applied Chemistry	CC	3	1	0	4
BMB-202 / BMB-202 a/ BMB-202 b/ BMB-202 c	Elements of Biochemistry/ Fundamentals of Biochemistry/Introductory Human Physiology/Chemicals and Health	CC	3	1	0	4
BMB-203 / BMB-203 a/ BMB-203 b/ BMB-203 c	Introduction to General Microbiology/ Elements of Microbiology/Chemical Microbiology/Microbial Technology	GE	3	1	0	4
BMB-204 / BMB-204 a	Career Skills/ Life Skills	AEC	2	0	0	2
BMB-251	Organic & Analytical Chemistry Lab	CC	0	0	2	2
BMB-252	Elements of Biochemistry Lab	CC	0	0	2	2
BMB-253	Introduction to General Microbiology Lab	GE	0	0	2	2
SM-201	Seminar	SM	0	0	1	1
GP-201	General Proficiency-II	GP	0	0	1	1
	TOTAL					22

THIRD SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits
BMB-301/ **BMB-301a/ BMB-301b/ BMB-301c**	Microbial Genetics/Inheritance & Evolutionary Microbiology/Microbiological Basis of Inheritance/Food Engineering	CC	3	1	0	4
BMB-302/ **BMB-302a**	Bacteriology & Virology/Global Ecology	CC	3	1	0	4
BMB-303/ **BMB-303a**	Mycology & Phycology/Public health & pandemics	CC	3	1	0	4
BMB-304	Biofertilizers and Biopesticide	SEC	2	0	0	2
BMB-305/ **BMB-305a**	Biomathematics and Biostatistics/Elementary Mathematics	GE	3	1	0	4
BMB-351	Microbial Genetics Lab	CC	0	0	2	2
BMB-352	Bacteriology & Virology Lab	CC	0	0	2	2
BMB-353	Mycology & Phycology Lab	CC	0	0	2	2
SM-301	Seminar	SM	0	0	1	1
GP-301/ **GP-301a/ GP-301b**	General Proficiency-III/Psychology/Sociology	GP	0	0	1	1
	TOTAL					**26**

FOURTH SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits
BMB-401 / BMB-401a/ BMB-401b/ BMB-401c	Molecular Biology/Economic Biology/Gender Studies/International Business in Dairy Science	CC	3	1	0	4
BMB-402/ BMB-402a BMB-402b/ BMB-402c/ BMB-402d	Immunology/Anthropology/Neurobiology/Nanotechnology/Aerobiology	CC	3	1	0	4
BMB-403/ BMB-403a BMB-403b	Microbial Physiology & Metabolism/Entomology/Agrostology	CC	3	1	0	4
BMB-404/ BMB-404a/ BMB-404b	Pharmaceutical Microbiology/Medicinal Microbiology/Epidemiology	SEC	2	0	0	2
BMB-405 / BMB-405 a	I.P.R., Bioethics & Biosafety/ Biogeography	IE	3	1	0	4
BMB-451	Molecular Biology Lab	CC	0	0	2	2
BMB-452	Immunology Lab	CC	0	0	2	2
BMB-453	Microbial Physiology & Metabolism Lab	CC	0	0	2	2
SM-401	Seminar/	SM	0	0	1	1
GP-401/ GP-401a	General Proficiency-IV/Animal Behavior	GP	0	0	1	1
	TOTAL					**26**

FIFTH SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits
BMB-501 / BMB-501 a	Medical Microbiology/ Medicinal Microbiology	CC	3	1	0	4
BMB-502 / BMB-502 a	Recombinant DNA Technology/ Microbial Technology	CC	3	1	0	4
BMB-503 BMB-503a	Bio-Analytical Tools/Instrumentation	CC	3	1	0	4
BMB-504 / BMB-504 a	Food and Dairy Microbiology/ Palaentology	DE	3	1	0	4
BMB-551	Medical Microbiology Lab	CC	0	0	2	2
BMB-552	Recombinant DNA Technology Lab	CC	0	0	2	2
BMB-553	Bio-Analytical Tools Lab	CC	0	0	2	2
BMB-554	Food and Dairy Microbiology Lab	CC	0	0	2	2
SM-501	Seminar	SM	0	0	1	1
GP-501	General Proficiency-V	GP	0	0	1	1
	TOTAL					**26**

SIXTH SEMESTER

Course Code	Course Title	Component	(L)	(T)	(P)	Credits

BMB-601/ BMB-601 a/ BMB-601 b	Microbiological Analysis of Air and Water/Hospital Management/Soil & Water Microbiology	DE	3	1	0	4
BMB-602/ BMB-602 a BMB-602 b	Marine Microbiology/Veterinary Science/Biodiversity	CC	3	1	0	4
BMB-603/ BMB-603a/ BMB-603b	Bioinformatics/Developmental biology and embryology/Population biology	DE	3	1	0	4
BMB-651	Microbiological Analysis of Air and Water Lab	DE	0	0	2	2
BMB-652	Marine Microbiology Lab	CC	0	0	2	2
BMB-653	Bioinformatics Lab	DE	0	0	2	2
BMB-604	Project/Dissertation	PJ	0	0	6	6
GP-601	General Proficiency-VI	GP	0	0	1	1
	TOTAL					**25**

Project/Dissertation

Note: Students must submit their project report in June /July and the same would be evaluated for 6 credit units, which would be included in the Sixth Semester marks.

Examination Scheme:

Components	Attendance	Class Test	Assignment/ Project/Seminar/Quiz	EE
Weightage (%)	10	20	10	60

School of Naturopathy (KSVMCN&YS)

Shobhit University, Gangoh

School Of Naturopathy

Ordinances, Regulations & Syllabus

For

Bachelor of Naturopathy & Yogic Sciences (BNYS) 5 ½ Year Programme Annual Pattern
(w.e.f. session 2016-17)

Revised and adopted (Approved by CCRYN) in the year 2022
(07th Board of Studies)

Programme Educational Objectives (PEOs)

PEO1 Knowledge of Naturopathy: Graduates should have a solid foundation in naturopathic principles, philosophy, and practices. They should possess in-depth knowledge of various natural therapies, such as nutrition, herbal medicine, hydrotherapy, acupuncture, and lifestyle counselling.

PEO2 Understanding of Human Anatomy and Physiology: Students should acquire a thorough understanding of human anatomy and physiology, including the structure and functions of different body systems. This knowledge is essential for diagnosing and treating health conditions using naturopathic methods.

PEO3 Diagnostic Skills: Graduates should be proficient in assessing patients' health conditions through various diagnostic techniques, including physical examination, laboratory tests, and assessment of health history. They should be able to identify the root causes of illnesses and design personalized treatment plans accordingly.

PEO4 Therapeutic Skills: Students should develop practical skills in implementing naturopathic therapies and modalities. These may include prescribing herbal remedies, designing nutritional plans, administering physical therapies, providing lifestyle counselling, and conducting yoga and meditation sessions.

PEO5 Holistic Approach: Graduates should understand the importance of treating patients holistically, considering their physical, mental, emotional, and spiritual well-being. They should be able to address health concerns by integrating naturopathy, yoga, and other complementary healing approaches.

PEO6 Patient Management: Students should learn effective patient management skills, including effective communication, patient education, and building a strong therapeutic relationship. They should be able to educate patients about their health conditions and motivate them to adopt healthy lifestyle practices.

PEO7 Ethical and Professional Standards: Graduates should adhere to high ethical and professional standards in their practice. They should understand the legal and regulatory frameworks governing naturopathic medicine and maintain confidentiality, integrity, and professionalism in their interactions with patients and colleagues.

Programme Specific Objectives (PSO's)

PSO1 Understanding of naturopathic principles and therapeutic modalities.

PSO2 Knowledge of yogic sciences and their benefits.

PSO3. Proficiency in diagnostic skills, including conventional and naturopathic methods.

PSO4 Familiarity with various naturopathic treatment modalities.

PSO5 Ability to design individualized treatment plans and provide natural and modern therapies.

PSO6 Enrich communication, ethical values team work, professional and leadership skill sets of students.

PSO7 Focus on health promotion and disease prevention.

Programme Outcome (PO's)

PO1 Providing knowledge of basic principles of naturopathy through interactive classes.

PO2 Making the students understand the disease through the perspective of naturopathy and yoga through clinical exposure.

PO3 Demonstrating the students how to take case study for proper diagnosis of diseases.

PO4 Working on the personal development and communication skills.

PO5 Providing proper knowledge of anatomy, physiology, biochemistry of human body.

PO6 Providing the basic knowledge of modern medicine

Bachelor of Naturopathy & Yogic Sciences (B.N.Y.S.)

Five and half years' Undergraduate Medical Degree in Yoga and Naturopathy
With effective from 2016

CONTENTS

Introduction

xi)   Colour therapy and Magneto biology

xii)   Forensic Medicine and Toxicology

xiii)   Manipulative Therapies

xiv)   Acupuncture and Acupressure

xv)   *Yoga* and its applications

xvi)   Nutrition and Medicinal Herbs

xvii)   Diagnostic Methods (I and II) Naturopathy and Conventional Medicine

xviii)   Psychology and Basic Psychiatry

xix)   Fasting therapy and Dietetics

xx)   Obstetrics and Gynecology

xxi)   *Yoga* therapy

xxii)   Hydrotherapy and Mud therapy

xxiii)   Physical Medicine and Rehabilitation

xxiv)   First Aid and Emergency Medicine

xxv)   Clinical Naturopathy

xxvi)   Research Methodology and Recent Advances

Section V : Teaching of Medical Ethics in BNYS Course

Annexure I   : Different Methods Recommended for Internal Assessment

Annexure II   : A comprehensive list of skills for a BNYS Graduate

INTRODUCTION

National Institute of Naturopathy (NIN), Pune, revised the BNYS syllabus, with a view of standardizing BNYS syllabi with uniform durations and course contents across the country in 2012. It was implemented by Rajiv Gandhi University of Health Sciences (RGUHS) in the academic year 2013-14. In the view of new regulations, University restructured the BNYS course and issued ordinance year wise of the course in 1996. The present volume is published incorporating the amendments made by the National Institute of Naturopathy, Pune, to the regulations of BNYS course and addition of certain topics to the syllabi, as well as change in duration from 5 years to 5½ years. The ordinance should be read with Revised Ordinance Governing BNYS Degree Course and Curriculum of first year to fourth year – 2013.

First year BNYS is of 1½ year duration, and consists of pre-clinical subjects and subjects describing Yoga and Naturopathy principles, Anatomy, Physiology, Biochemistry, Philosophy of Naturopathy, Principles of Yoga and Sanskrit. Second year BNYS is of 1 year duration, and consists of Para-clinical subjects and subjects describing philosophies of Yoga and Naturopathy clinical subjects, Pathology, Microbiology, Community Medicine, *Yoga* Philosophy, Basic Pharmacology, and Colour therapy and magneto biology. Third year BNYS is of 1 year duration, and consists of Para-clinical subjects and Yoga and Naturopathy clinical subjects, Forensic Medicine and Toxicology, Manipulative Therapies, Acupuncture and Acupressure, *Yoga* and its applications, Nutrition and Medicinal Herbs, Diagnostic Methods (I and II) Naturopathy and Conventional Medicine, Psychology and Basic Psychiatry, and Fasting therapy and Dietetics. Final year BNYS is of 1 year duration, and consists of clinical subjects and Yoga and Naturopathy clinical subjects Obstetrics and Gynecology, *Yoga* therapy, Hydrotherapy and Mud therapy, Physical

Medicine and Rehabilitation, First Aid and Emergency Medicine, Clinical Naturopathy and Research Methodology and Recent Advances.

In Section I, goals of BNYS course are given. Section II gives general objectives. Section III gives duration of the course, recommendations regarding attendance, internal assessment, distribution of marks for various subjects in professional examinations and criteria for pass. Revised course contents, subjects like Pharmacology, Forensic Medicine and Toxicology, Sanskrit, Principles of Yoga, Herbology, Clinical Naturopathy, Psychology and Basic Psychiatry, Clinical Naturopathy, Research Methodology and Recent Advances are added in this publication – are elaborated in Section IV. Section V deals with topics recommended for teaching of medical ethics.

SECTION I

1 Goals of BNYS Course

1.1 Recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy;

1.2 Develop the skills in most of the competencies, and training that are required to deliver the Naturopathy and Yoga health care system;

1.3 Become aware of the contemporary advances and developments in the discipline concerned;

1.4 Acquire a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology;

1.5 Become proficient in their profession by developing scientific temper and improve educational experience;

1.6 Identify social, economic, environmental, biological and emotional determinants of health in a given case and take them into account while planning therapeutic, rehabilitative, preventive and promotive measures/strategies;

1.7 Plan and devise measures in Naturopathy and yoga for the prevention and rehabilitation of patients suffering from disease and disability ;

1.8 Demonstrate skills in documentation of individual case details as well as morbidity data relevant to the assigned situation;

1.9 Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behavior in accordance with the societal norms and expectations;

1.10   Play the assigned role in the implementation of national health programs, effectively and responsibly;

1.11   Organize and supervise the chosen/assigned health care services Demonstrating adequate managerial skills in the clinic/hospital or the field Situation;

1.12   Develop skills as a self-directed learner; recognize continuing educational needs, select and use appropriate learning resources;

1.13   Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature;

1.14   To implement all National health policies ;

1.15   Work towards realization of _Health for all', as a national goal through naturopathy and yoga;

1.16   To follow the medical ethics and to fulfill the social and professional responsibilities as a Naturopathy and Yoga Physician through drugless therapies;

1.17   Be competent in the practice of holistic medicine with expert knowledge and experience in promotive, preventive, curative and rehabilitative aspects of diseases;

1.18   Become proficient in their profession by developing scientific temper and improve educational experience;

2 Institutional Goals

After the medical undergraduate program, the students must:

2.1 Be able to expertly diagnose and manage common diseases and health problems of individuals as well as community, work with the health team as a fully qualified doctor at primary, secondary or tertiary levels, with his/her clinical experience and skills in history, physical examination and relevant investigations;

2.2 Be proficient in promotive, preventive, curative and rehabilitative medicine and therapy for common health issues;

2.3 Be adept in different therapeutic modalities and their administration;

2.4 Develop a humane attitude towards one's clients and understand economic, environmental, social, psychological and cultural factors that influence health;

2.5 Enjoy an urge for self-improvement, directed towards advanced expertise or research in any chosen area of health care;

2.6 Have enough knowledge about implementation of National Health Programs and the basic factors required for the same, which are as follows;

2.6.3 Family Welfare and Maternal and Child Health (MCH);

2.6.4 Sanitation and Water Supply;

2.6.5 Prevention and Control of communicable and non-communicable diseases;

2.6.6 Immunization;

2.6.7 Health education;

2.7 Possess management skills in human resources, materials and resource management in health care delivery;

2.8   Be competent in recognizing community health issues and design, institute

        curative and preventive measures and evaluate the outcome of these

        measures, thus working towards resolving these issues;

2.9   Be able to work successfully in a variety of health care settings;

2.10   Develop integrity, responsibility, reliability, dependability and compassion,

        which are characteristics required for successful professional life;

2.11   Develop leadership and communication skills to work as leading investigator

        or clinician in health care teams;

SECTION II

1.   Objectives of Medical Graduate Training Programme

1.1.   To effectively integrate the conventional basic sciences

(e.g. human physiology) with the traditional medical systems and to

enhance the understanding of their effects and therapeutic potential;

1.2   To provide state of the art learning facilities (e.g. audio visual aids,

interactive learning systems) to conceptualize the ancient medical system;

1.3   To run advanced laboratories under each department (basic and clinical

sciences) for effective experimental training and research;

1.4   To explore the possibilities of promoting effective integrated medical

practice at conventional medical facilities attached to the institute;

1.5   To provide the best possible clinical setting for clinical training and

research;

1.6   To prepare every Yoga and Naturopathic physician with an in depth

understanding of Basic sciences, superior clinical training and with an

outlook for research and development;

1   Course of Study:

The duration of the course shall be 5 ½ years (Five and half years). The course shall include a period of regular study of four and a half (4 ½) years, followed by a compulsory rotatory internship of one year.

The period of regular study shall be divided into four phases – first year of one and half (1½) years, and the Second, Third and Final years of one year each of the B.N.Y.S. Medical Degree Course respectively.

2   Attendance:

A candidate shall be considered to have satisfied the requirement of attendance for each Part/Phase if he /she attends not less than 80 per cent of the theory and practical classes actually conducted up to the end of the Phase in that subject.

Such a candidate having shortage of attendance shall be required to attend 80 per cent of the theory and practical classes actually held up to the end of the term by repeating that subject of that Part/Phase during a subsequent term.

3   Teaching Hours:

The allotment of time (in number of hours) to teach Theory and to conduct

Practical/Clinical and Tutorial /Demonstration, Seminar in each subject shall be:

I YEAR B.N.Y.S. (18 months)

No. of Subjects	No. of Papers	SUBJECTS	TOTAL HOURS
I	01.	Anatomy – I	550hrs
	02.	Anatomy – II	
II	03.	Physiology – I	500hrs
	04	Physiology – II	
III	05.	Biochemistry	300hrs
IV	06.	Philosophy of Naturopathy	325hrs
V	07.	Principles of *Yoga*	400hrs
		Total Hours	**2175hrs**

II YEAR - B.N.Y.S. (12 Months)

No. of Subjects	No. of papers	SUBJECTS	TOTAL HOURS
I	01.	Pathology	300
II	02.	Microbiology	200
III	03.	Community Medicine	250
IV	04.	*Yoga* Philosophy	350
V	05.	Basic Pharmacology	100
VI	06.	Colour Therapy and Magneto biology	150
VII	07.	Forensic Medicine & Toxicology	100
		Total Hours	**1450**

III YEAR B.N.Y.S. (12 months)

No. of Subjects	No. of Papers	SUBJECTS	TOTAL HOURS
I	01.	Manipulative Therapies	200
II	02.	Acupuncture & Acupressure	200
III	03.	*Yoga* & Its Applications	250
IV	04.	Nutrition & Medicinal herbs	250
V	05.	Diagnostic Methods - I (Naturopathy)	200
	06.	Diagnostic Methods -II (Conventional Medicine)	200
VI	07.	Psychology & Basic Psychiatry/An Introduction to Speech Therapy/ Music Therapy	150
		Total Hours	**1450**

IV YEAR B.N.Y.S. (12 months)

No. of Subjects	No. of Papers	SUBJECTS	TOTAL HOURS
I	01.	Fasting Therapy & Dietetics	200
II	02.	Obstetrics & Gynecology	150
III	*Yoga* Therapy		250
III	03.	*Yoga* Therapy	250
IV	04.	Hydrotherapy & Mud Therapy	250
V	05.	Physical Medicine & Rehabilitation	200
VI	06.	First Aid & Emergency Medicine	100
VII	07.	Clinical Naturopathy	200
VIII	08.	Research Methodology & Recent Advances/ Hospital Management/ Publication Ethics and Database	100
		Total Hours	**1450**

GRAND TOTAL FOR 4 ½ YEARS IS 6525 hours.

Internship program:

A candidate after passing final B.N.Y.S. Medical Degree Examination shall undergo the compulsory rotatory internship of one year duration, which shall consist of work/duty postings in the following sections/departments for the period specified against them.

S.No.	Department	Duration
1.	Philosophy of *Yoga* and Naturopathy	1 Month
2.	*Yoga* and Mind-Body Medicine	1 Month
3.	Pathology and Microbiology	1 Month
4.	Community Medicine	1 Month
5.	Energy Medicine	1 Month
6.	Manipulative Therapies, Physical Medicine & Rehabilitation	1 Month
7.	Fasting, Dietetics, Nutrition, & Medicinal Herbs	1 Month
8.	Diagnostic Methods	1 Month
9.	Obstetrics & Gynecology	1 Month
10.	Hydrotherapy & Mud Therapy	1 Month
11.	Naturopathic Medicine	1 Month
12.	Allied Health Sciences	1 Month
	TOTAL	**12 Months**

4   <u>Scheme of Examination:</u>

The examination/s shall be held as per the date of Examination notified by the University. There should be one Internal & One External Examiner for all practical &Viva exams for each subject. A candidate shall register for all the subjects of a term/year, when he/she appears for the first time to the examination of that Part.

4.1   <u>Internal Assessment: Scheme of Examination:</u>

There shall be an internal assessment which follows broadly the principles enunciated by the University in each subject for which 20 per cent of the marks are set apart and these will be added in the final grade in the University examinations. There shall be a minimum of two assignments and two periodical tests in every subjects of each year to assess the progress of the candidate.

If a candidate fails in an Examination, his/her internal assessment shall be assessed again as if he/she is a regular student for the second attempt only.

Theory

Minimum of 3 examinations is recommended. The examination preceding the university examination may be similar to the University Examination. Average marks of the better of the two notified internal examinations should be reduced to the marks allotted for internal assessment for each subject and should be sent to the university.

Practical

A minimum of one clinical test may be conducted at the end of each ward postings in all the clinical subjects.

Assistant professor and above or lecturer with five years of teaching experience can conduct internal assessment examination. Average of best two examination marks should be taken into consideration while calculating the marks of internal assessment.

The internal assessment marks of both theory and practical obtained by the candidates should be sent to the University at least 15 days prior to the commencement of the theory examination.

4.2 Subjects And Credit

I YEAR BNYS

S.No.	Subject Name	Subject Code	Credit
1	Anatomy I	BNY – 101	3
2	Anatomy II	BNY – 102	3
3	Physiology I	BNY – 103	3
4	Physiology II	BNY – 104	3
5	Biochemistry	BNY – 105	3
6	Philosophy of Naturopathy	BNY – 106	4
7	Principles of Yoga	BNY – 107	3
8	Anatomy	BNY – 151	1
9	Physiology	BNY – 153	1
10	Biochemistry	BNY – 155	1
11	Philosophy of Naturopathy	BNY – 156	1
12	Principles of Yoga	BNY – 157	1

II YEAR BNYS

S.No.	Subject Name	Subject Code	Credit
1	Pathology	BNY – 201	3
2	Microbiology	BNY – 202	2
3	Community Medicine	BNY – 203	3
4	Yoga Philosophy	BNY – 204	3
5	Color therapy and Magneto biology	BNY – 205	1
6	Basic Pharmacology	BNY – 206	3
7	Forensic Medicine and Toxicology	BNY – 207	2
8	Pathology	BNY – 251	1
9	Microbiology	BNY – 252	1
10	Community Medicine	BNY – 253	1
11	Yoga Philosophy	BNY – 254	1
12	Color therapy and Magneto biology	BNY – 255	1

III YEAR BNYS

S.No.	Subject Name	Subject Code	Credit
1	Manipulative Therapies	BNY – 301	3
2	Acupuncture & Acupressure	BNY – 302	3
3	*Yoga*& Its Applications	BNY – 303	3
4	Nutrition & Medicinal herbs	BNY – 304	3
5	Diagnostic Methods - I(Naturopathy)	BNY – 305	3
6	Diagnostic Methods -II (Conventional Medicine)	BNY – 306	3
7	Psychology & Basic Psychiatry/ An Introduction to Speech Therapy/ Music Therapy	BNY – 307/BNY-307 A/BNY-307 B	2
8	Manipulative Therapies	BNY – 351	1
9	Acupuncture & Acupressure	BNY – 352	1
10	*Yoga*& Its Applications	BNY – 353	1

11	Nutrition & Medicinal herbs	BNY – 354	1
12	Diagnostic Methods - I(Naturopathy)	BNY – 355	1
13	Diagnostic Methods -II (Conventional Medicine)	BNY – 356	1
14	Psychology & Basic Psychiatry	BNY – 357	1

IV YEAR BNYS

S.No.	Subject Name	Subject Code	Credit
1	Fasting Therapy & Dietetics	BNY – 401	3
2	Obstetrics & Gynecology	BNY – 402	3
3	*Yoga* Therapy	BNY – 403	3
4	Hydrotherapy & Mud Therapy	BNY – 404	3
5	First Aid & Emergency Medicine	BNY – 405	2
6	Clinical Naturopathy	BNY – 406	1
7	Physical Medicine & Rehabilitation	BNY – 407	3
8	Research Methodology &Recent Advances /Hospital Management/ Publication Ethics and Database	BNY – 408/BNY-408 A/ 408 B	1
9	Fasting Therapy & Dietetics	BNY – 451	1

10	Obstetrics & Gynecology	BNY – 452	1
11	*Yoga* Therapy	BNY – 453	1
12	Hydrotherapy & Mud Therapy	BNY – 454	1
13	First Aid & Emergency Medicine	BNY – 455	1
14	Clinical Naturopathy	BNY – 456	1
15	Physical Medicine & Rehabilitation	BNY – 457	1
16	Research Methodology &Recent Advances	BNY – 458	1

4.3   Eligibility for examination:

A candidate who has passed in all the subjects of First B.N.Y.S. Medical Degree examination shall be eligible to be promoted to Second B.N.Y.S. Medical Degree course.

A candidate is eligible for carry over facility only if he/she has appeared for all the subjects of that particular examination.

First year to Second Year – 3 subjects carry over

Second year to Third year - 3 subjects carry over

Third Year to Final year – 3 subject carry over

Completion of the degree should not go beyond 11 years from the date of admission.

4.4   Criteria for Pass

To be eligible for promotion to the II, III & IV years, the candidate has to complete and pass in all the subjects of I, II & III years with an exemption of one subject in each year.

The candidate is declared to have been successful provided he/she secures minimum 40% and above in theory, 50% and above in oral/practical/clinical separately each subjects, but should get 50% in aggregate in all.

4.5   Declaration of Class:

A candidate who passes all the subjects of one examination in the first attempt only be eligible for a class.

No class or rank shall be declared for candidate who does not pass any examination in the first attempt, and such a candidate shall be eligible only for a pass class.

The percentage of marks for declaring pass/Second/First Class and First class with Distinction shall be as follows:

Distinction	Not less than 75 percent of the Aggregate Marks
First class	Not less than 65 percent of the Aggregate Marks
Second class	Not less than 50 percent of the Aggregate Marks
Pass class	Candidate who passes the examination in more than one attempt

Note: - A candidate who passes in all the subjects of any Examination only in first attempt shall be eligible for First class with Distinction /First/Second Class

School of Education

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Education

Ordinances, Regulations & Syllabus

For

Bachelor of Education (B.Ed.) Two Year Programme Annual Pattern

(w.e.f. session 2021-22)

Revised and Approved in the year 2021

(Board of Studies; 28.06.2021)

Programme Educational Objectives (PEOs)

PEO 1 To enable the prospective teachers to understand the nature purpose and Philosophy of School Education.

PEO 2 To acquire knowledge and develop an understanding of various aspects of school management.

PEO 3 To change the behavior, attitude and values through which learners can make responsible and accountable agents of society

PEO 4 To provide a rich programme of curricular and extra- curricular activities for overall development of learner's personalities.

PEO 5 To prepare prospective teachers to understand psychological and sociological aspects of child's development.

PEO 6 To enable the learners to gain in-depth conceptual knowledge in the area of education at primary and secondary levels

PEO 7 To prepare up-coming teachers to understand child's behavior under different condition.

PEO 8 To make familiar student- teachers to various teaching methodologies prevailing across the world.

PEO 9 To sensitize student- teachers about various social and educational issues.

PEO 10 To enable them to be more creative in their outlook as teachers and to be positive in their attitude and approach.

PEO 11 To develop competencies and skills required for becoming a reflective and humane teacher.

PEO 12 To sensitize them towards the promotion of social cohesion National integration and International understanding

PEO 13 To develop communication skills, train them to use modern information and communication technology for school purposes

PEO 14 To train them in conducting action research in educational situation and to improve the pedagogical practices in their subjects.

Programme Specific Objectives (PSO's)

PSO 1 Problem Solving Skills – Learners will able to develop reflective and analytical skills and understanding of critical issues of education.

PSO 2 Professional Skills – Learners will be able to build skills and abilities of communication, reflection, art, aesthetics, and self- expression.

PSO 3 Successful Career – Learners will exhibit contemporary knowledge in education and will be competent to work in private and government institutions.

PSO 4 The Teacher and Society– Learners will be able to develop understanding about child's pedagogy, school management and community involvement.

Programme Outcome Objectives (POO's)

POO 1 Teaching knowledge: To be able to use learner centered teaching methods and to assess children's learning ability using different pathways.

POO 2 Problem analysis: To enable the prospective teachers to deal with both the personal and academic problems of students.

POO 3 Design/ development of solutions: To be able to find and develop the solution of problems of learners related to teaching field.

POO 4 Conduct investigations of complex problems: Being able to understand and investigate complex problems and find out their solutions.

POO 5 Modern tool usage: To be able to adopt modern techniques for teaching skill development.

POO 6 The teacher and society: To be able to engage with self, child, community and school to establish close connections between different curricular areas.

POO 7 Environment and sustainability: To develop the knowledge, skills, values, attitudes and behavior among students to understand and care for their environment.

POO 8 Ethics: To be able to develop possible ethical boundaries and values perceived by learners in teaching institutions.

POO 9 Individual and team work: Student-teacher will be able to share insights, work together productively and efficiently to reach their goal and attain a positive outcome.

POO 10 Communication: To be able to develop a strong sense of wellbeing and effective communicators and to communicate effectively, verbally as well as in writing.

POO 11 Project management and finance: Being able to develop projects related to curriculum and study the financial needs and find the ways to meet them.

POO 12 Life-long learning: Being able to demonstrate reading, writing, listening and speaking skills and also develop an ability to reflect on their own understanding.

Course Structure

The present B.Ed. syllabus for two-year programme has been designed on the current guidelines of NCTE & UGC with the view to make the student-teachers reflective practitioners. The programme is comprised of three broad inter-related curricular areas: -

(A)   :   Perspectives in Education: Core Courses (CC)
(B)   :   Curriculum and Pedagogic Studies: Pedagogy Courses (PC)
(C)   :   Engagement with the Field/Practicum (EF)

Transaction of the courses is to be done using a variety of approaches, such as tasks and assignments, projects, group discussion, seminar, interactions with community in multiple socio-cultural environments.

Group (A): Perspectives in Education- Core Courses (CC)
These courses are intended to provide a conceptual understanding of relevant concepts and processes in teacher education and also situate them in the broader perspective of education and development.

CC 1: Contemporary India and Education

This course deals with conceptual understanding about issues of diversity, inequality and marginalization in Indian society, the implications for education with analysis of significant policy debates in Indian education.

CC 2: Philosophical & Sociological Perspectives of Education

This course deals with philosophical and sociological issues and provides an opportunity to understand and reflect on the vision of education as well as cultural context within which education operates.

CC 3: Growing up as a Learner

This course deals with individual development, nature and process of learning and an understanding of how learning and cognition are closely inter-related throughout individual development process.

CC 4: Teacher, Teaching and Technology

This course deals with rules and expectations of teachers in the form of accountability and code of ethics and the nature and various aspects of the teaching process in view of the professional development of the teacher.

CC 5: Creating an Inclusive School

This course deals with understanding of the cultures, policies and practices that need to be addressed in order to create an inclusive school and identify & utilize existing resources for promoting inclusive practices.

CC 6: Gender, School and Society

This course deals with meaning and experience of being a boy or a girl across different social groups, regions and time-periods. It also deals with gender inequalities through a variety of institutions such as the family, caste, religion, culture, the media and popular culture, law and the state.

CC 7: Knowledge, Language and Curriculum

This course deals with meaning, nature and sources of knowledge, to develop the ability of reading, comprehension and writing skills & to understand concepts and principles of curriculum development.

Group (B): Curriculum and Pedagogic Studies- Pedagogy Courses (PC)

These courses pertain mainly to help student-teachers become effective teachers. For this, it offers the student-teachers not only reorganize one's previous understanding of one's subject of specialization but also the pedagogy as the integration of knowledge about the learner, the discipline and the societal context of learning, so that they may try out evolving a few learning situations and carry them out both in simulated as well as real situations.

PC 1 & PC 2: Pedagogy of School Subjects - I & II – Optional Courses

These courses intend to enable student-teachers to recognize the nature of knowledge in various subject areas i.e. Sciences (Physical/Biological/Mathematics), Social Sciences, Languages (Hindi/English/Sanskrit), Commerce, Home Science, Computer Science and will help in developing & understanding of the pedagogical requirements in various teaching-learning situations. Each student-teacher will choose two School Subjects on the bases of his/her Graduation Stream.

PC 3: Assessment for Learning

This course intends to lead to an understanding and appreciation of the relevance of assessment the how and why of it, as well as develop necessary competence in involving appropriate assessment modes in line with learning objectives. It also clarifies the significant shift in emphasis of the terms 'assessment for learning' as against 'assessment of learning.

PC 4: Optional Courses – any one of the following

I. Educational Administration and Management
II. Guidance and Counseling
III. Environmental Education
IV. Computer Education
V. Health, Physical Education and Yoga
VI. Life Style Management
VII. Peace Education
VIII. Value Education
IX. Adult and Population Education
X. School Leadership

Group (C): Engagement with the Field/Practicum (EF)

EF 1: Task and Assignment

Task and Assignments that run through all the courses CC 1-7 and PC 3-4.

EF 2: Practicum

(A): Preparation to Function as a Teacher (Teaching Skills)

This is visualized as a shorter-duration initial experience (5 weeks) of student-teachers to train in lesson-planning based on constructivist approach, micro-teaching skills and playing the role of teacher in simulated condition as well as in real classroom situation. It will help him/her to prepare himself/herself as a teacher possessing teaching skills.

(B): School Internship

This is visualized as a longer-duration field experience (16 weeks) of student-teachers supported by relevant interactive exposures within the school. During this period he/she will teach in the school, observe and participate in the day-to-day functioning of school, prepare a Journal containing day-to-day report about all activities including evaluation tools, and conduct an Action Research Project based on any school problem. It will help him/her to become a professional teacher, possessing teaching-competence.

EF 3: Enhancing Professional Capacities: Optional Courses

A part from conceptual and practical learning gained through Core Courses (CC) and Pedagogy Courses (PC), student-teachers need to develop professional competencies and to experience the fact that the teacher is much more than someone who teaches a subject. The teacher is potentially a participant in the wider education system and he/she may play not only a proactive role in the community life of the school but also as an agent of social development and social transformation. It includes a number of experiences that will enhance the capacity of student-teachers in various essential dimensions. Each student-teacher will choose any three EPC activities in each year i.e. three in first year & three in second year.

EPC 1: Strengthening Language Proficiency
EPC 2: Art and Aesthetics
EPC 3: Reading and Reflecting on Texts
EPC 4: Understanding of ICT
EPC 5: Scouting and Guiding
EPC 6: Working with Community
EPC 7: Basics of Research
EPC 8: Drama and Art in Education
EPC 9: Entrepreneurship Development

Papers in the First Year

From Group (A):

Four compulsory papers as-
1. Contemporary India and Education
2. Philosophical & Sociological Perspectives of Education
3. Growing up as a Learner
4. Teacher Teaching Technology

From Group (B):

Two Papers as PC 1 & 2 (Pedagogy of School Subjects - I & II)

(PC 1 & PC 2) These courses intend to enable student-teachers to recognize the nature of knowledge in various subject areas i.e. Sciences (Physical/Biological/Mathematics), Social Sciences, Languages (Hindi/English/Sanskrit), Commerce, Home Science, Computer Science and will help in developing & understanding of the pedagogical requirements in various teaching-learning situations. Each student-teacher will choose two School Subjects on the bases of his/her Graduation Stream.

From Group (C):

EF 1: Task and Assignment

Task and Assignments that run through all the courses CC 1-4 and PC 1 & 2.

EF 2: Practicum (A): Preparation to Function as a Teacher (Teaching Skills)

EF 3: Enhancing Professional Capacities: Optional Courses

Each student-teacher will choose any three EPC activities in first year.

Papers in the Second Year

From Group (A):
Three compulsory papers as-
1. Creating an Inclusive School.
2. Gender, School and Society.
3. Knowledge, Language and Curriculum.

From Group (B):

Two Papers as PC-3 (Assessment for Learning) & PC-4 (Optional Courses)

From Group (C):

EF 1: Task and Assignment

Task and Assignments that run through all the courses CC 5-7 and PC 3 & 4.

EF 2: Practicum (B): School Internship
EF 3: Enhancing Professional Capacities: Optional Courses

Each student-teacher will choose any three EPC activities in second year.

B.Ed. SYLLABUS FRAMEWORK
(Based on NCTE Regulations 2014)

B.Ed. FIRST YEAR

Course Code	Title of the Course	Credits	Hours	Marks (External +Internal)
Perspectives of Education – Core Courses				
E 101	CC 1: Contemporary India and Education	4	96	80+20
E 102	CC 2: Philosophical and Sociological Perspectives of Education	4	96	80+20
E 103	CC 3: Growing up as a Learner	4	96	80+20
E 104	CC 4: Teacher, Teaching and Technology	4	96	80+20
Pedagogical Courses- Optional*				
E 201 to 210	PC 1& 2: Pedagogy of School Subjects (Any two from the Table No. 1)	8 (4+4)	192(96+96)	80+20 80+20
Engagement with the Field/Practicum				
E 701	EF 2(A): Preparation to Function as a Teacher	4	8 weeks	80+20
E 702	Viva- Voce Examination based on 1. Task and Assignments that run through all the courses CC 1-4 and PC 1 & 2 2 EPC Activities of First Year*	2	4 weeks	80+20
TOTAL		**30**	**576 Hours + 12 Weeks**	**800**

B.Ed. Second Year

Course Code	Title of the Course	Credits	Hours	Marks (External +Internal)
Perspectives of Education – Core Courses				
E 301	CC 5: Creating an Inclusive School	3	72	40+10
E 302	CC 6: Gender, School and Society	3	72	40+10
E 303	CC 7: Knowledge, Language and Curriculum	3	72	40+10
Pedagogical Courses				
E 401	PC 3 Assessment for Learning	4	96	80+20
E 501 to 506	PC 4 (Optional Courses)* (Any one from the Table No. 2)	3	72	40+10
Engagement with the Field/Practicum				
E 703	EF 2(B): School Internship*	8	16 weeks	160+40
E 704	Viva- Voce Examination based on 1. Task and Assignments that run through all the courses CC 5-7 and PC 3 & 4 2 EPC Activities of Second Year*	2	4 weeks	80+20
TOTAL		**26**	**432 Hours + 20 weeks**	**600**

Note: 1 Credit = 24 Hours (Theory), 1 Credit = 2 Weeks (Practical)

Table No. 1
PC 1 & 2: Pedagogical Courses- Optional

These courses intend to enable student-teachers to recognize the nature of knowledge in various subject areas i.e. Sciences (Physical/Biological/Mathematics), Social Sciences, Languages (Hindi/English/Sanskrit), Commerce, Home Science, Computer Science and will help in developing & understanding of the pedagogical requirements in various teaching-learning situations. Each student-teacher will choose two school subjects on the bases of his/her Graduation Stream.

S. No.	Paper Code	Paper Name
1.	E 201	Pedagogy of Hindi
2.	E 202	Pedagogy of English
3.	E 203	Pedagogy of Sanskrit
4.	E 204	Pedagogy of Social Sciences
5.	E 205	Pedagogy of Mathematics
6.	E 206	Pedagogy of Physical Science
7.	E 207	Pedagogy of Biological Sciences
8.	E 208	Pedagogy of Computer Science
9.	E 209	Pedagogy of Home Science
10.	E 210	Pedagogy of Commerce

Table No. 2
PC-4: Optional Courses

Each student-teacher will choose one paper from the following list.

S. No.	Paper Code	Paper Name
1.	E 501	Educational Administration and Management
2.	E 502	Guidance and Counseling
3.	E 503	Environmental Education
4.	E 504	Computer Education
5.	E 505	Health, Physical Education & Yoga
6.	E 506	Life Style Management
7.	E 507	Peace Education
8.	E 508	Value Education
9.	E 509	Adult and Population Education
10.	E 510	School Leadership

Ordinance and Regulations

A. Duration Of Course

1. Bachelor of Education (B.Ed.) course shall be a two-year full time professional pre-service teacher education programme with two year divided in yearly course and the examination shall be held at the end of each year.
2. First year shall be from 25th August to 30th April and the stretch of the second year shall be from 25th July to 20th April. At the end of each year the candidates shall be required to present themselves for examination.
3. It shall be a full-time course including Theory, Practice in teaching, internship, field work, professional development and other prescribed activities.

B. Total Intake

Total intake of B.Ed. course in the School of Education, Shobhit University, Gangoh shall be 100 as per NCTE norms.

C. Eligibility Criteria

The eligibility requirement for the admission of the candidates to B.Ed. course shall be in accordance with the eligibility criteria determine by NCTE/ U.P. Govt. Order issued from time to time.

D. Procedure of Admission

1. Admission to B.Ed. course shall be made in accordance with N.C.T.E rules and notifications issued from time to time.
2. Reservation of seats shall be as per N.C.T.E notifications.

E. Academic Session

First year of Bachelor of Education (B.Ed.) programme shall be Eight months long 25thAugust to 30th April excluding year-end examination and ten days winter break. Second year of Bachelor of Education (B.Ed.) programme shall be eight and half month long (25th July to 30th April).

F. Classification of Successful Candidates

1. No candidate shall be declared to be passed B.Ed. examination unless he/she secures 40% marks in aggregate of all the theory courses and 50% marks in practically separately for each academic session.

2. The division shall be determined on the aggregate of marks of all the courses prescribed for the degree separately in theory and practical in both the years as under:

Division in theory & Practical separately	Percentage of marks
First division	60% or above
Second division	50% or above but below 60%
Third division in theory only	40% or above but below 50%

Note: The student will be awarded divisions separately in Theory & Practical Examination.

G. Examination: Rules And Regulations

1. Students who have completed their course for the Bachelor of Education (B.Ed.) First yearly but have failed to appear/ pass the yearly examination will be allowed to re-appear in the subsequent First yearly examination. Those who fail to appear/ pass in any paper in the second yearly may be permitted to appear at the next year' examination without further attendance at lectures if their applications for permission meet with the approval of the Head of the School of Education and the Dean, Faculty of Education.

2. Candidates allowed to appear at the Bachelor of Education (B.Ed.) yearly examination under this ordinance as exempted candidates shall be required to pay the examination fee as prescribed by the University.

3. There shall be a Yearly-End examination and each student has to appear in all papers/ including Theory, Practical's, and Practice in teaching, internship, field work, and professional development.

4. Those candidates who pass a yearly examination can appear for improvement in only one theory paper of a yearly at the next Back Paper/ Regular examination of that yearly and not thereafter. However, the improvement facility will not be given in all the papers prescribed in the course.

5. Students of following categories shall be 'Eligible for Back Paper (EBP)'. An EBP candidate shall be promoted to next yearly. The back paper facility in a yearly provides promotion to the next yearly and another opportunity to obtain a minimum of the pass marks assigned for an individual paper or in the aggregate.

6. The candidates who fail to secure an aggregate of 50% of the maximum marks for a yearly but have obtained 40% of the maximum marks assigned to each of their papers may appear in all the papers as exempted candidate or may appear in only one theory paper of his choice as EBP candidate to secure a minimum in the aggregate.

7. The candidates who secure an aggregate of 50% of the maximum marks for a yearly but fail to secure a minimum of 40% of the maximum marks in one out of four papers prescribed for the yearly papers or in case where there are more than four papers prescribed for the yearly, the candidates who have failed in two theory papers or have failed in one theory paper shall be declared 'EBP'. Such candidates will appear only in their unclear papers.

8. A candidate with two out of three or three out of four uncleared papers in his/ her first yearly examination shall be declared 'Failed' but will be promoted to the second yearly but not beyond till he/ she becomes a candidate under 3 or 4 by appearing as an exempted candidate in the next Back paper/ Regular examination of that yearly and not thereafter. Such a promotion from third to fourth yearly shall also be

9. The back paper facility will not be given to a candidate if the number of his uncleared papers in all of his previous yearly examinations exceeds three.

10. The examination for the degree of the bachelor of education shall include: Theory of Examination, practice in teaching examination and practical examination, internship and professional development activities.

11. The students shall be required to complete their practice- in- teaching work, the prescribed Practical work, internship, field work, and other activities as per regular schedule of the department and the institution.

    If candidate after completing the required percentage of attendance fails to appear in theory or in practical or both, he /she will be considered as ex-student in both theory as well as practical without attending further regular classes in the first or second year respectively.

12. A candidate shall be required to offer the course as prescribed in the syllabus. The theory courses shall carry 100 or 50 maximum marks in both the years. The practical course (E 701) EF 2(A): Preparation to function as a Teacher & E 702 Viva- Voce Examination based on 1. Task and Assignments that run through all the courses CC 1-4 and PC 1 & 2 will be of 200 marks in the first year, out of these 40 marks will be evaluated internally by the subject supervisors respectively and the remaining 160 marks by the board of examiners. In the same way, the practical course (E 703) EF 2(B): School Internship & E 704 Viva- Voce Examination based on 1. Task and Assignments that run through all the courses CC 5-7 and PC 3 & 4 will be of 300 marks in the second year, out of those 60 marks will be evaluated internally by the subject supervisors respectively and the remaining 240 marks by the board of examiners.

13. For a pass, a candidate is required to be obtain at least 40% marks in each paper with a minimum of 40% marks in external and internal assessment separately and 40% in the total aggregate in theory, 50% marks in external and internal assessment in practical separately and 50% in the total aggregate in practical in each year.

14. A candidate who has passed the B.Ed. first year examination may reappear in maximum two theory paper(s) of first year along with the second year examination in the immediately following year and in that case better performance in each such paper will be counted for working out the result.

15. A candidate who has passed the B.Ed. second year examination may reappear in maximum two theory paper of second year in the immediately following year and in that case better performance in each such paper will be counted for working out the result.

16. Candidates are given only one chance to reappear at the same examination for the purpose of improvement of performance in the immediately following year.

Year	Marks
First Year	800 (600 Theory + 200 Practical)
Second Year	600 (300 Theory + 300 Practical)
Total	**1400**

17. If a candidate fails in one or two paper of the first year examination, he/she may appear at the second year B.Ed. examination along with the one or two the failing paper(s) of the first year examination simultaneously. In case, he/she does not pass the failing paper(s) of the first year examination even at this chance, he/she will be required to reappear at the first year examination in full.

18. In the same way, if a candidate fails in one or two paper(s) of second year examination, he/she will have to appear in one/two paper(s) of the second year in the immediately following year .in case, he/she will be required to appear at the second year examination in full.

19. Each theory paper shall carry 100/50 marks which are allocated in the proportion of 80: 20 for year-end theory examination.

20. The division of marks in two year of Bachelor of Education (B.Ed.) programme shall be as follows:

- Theory Papers 900 marks
- Practice in Teaching Examination with 500 marks.

21. The medium of the written exam shall be Hindi or English only.

H. Awards of Degree

The degree, Bachelor of Education (B.Ed.) shall be awarded by Shobhit University, Gangoh to candidates who have pursued a regular course of study in the university and have fulfilled all the conditions and have passed the prescribed examinations.

I. Evaluation Scheme

The performance of the candidates appearing in B.Ed. examination will be evaluated as follows:

1. The evaluation of B.Ed. pupil teacher will be done in 1400 marks the division will be awarded separately in theory out of 900 marks and in practical out of 500 marks.
2. The theory part in all the papers **Perspectives in Education: Core Courses (CC) & Curriculum and Pedagogic Studies: Pedagogy Courses (PC)** will be evaluated through a system of external examination (80%) and internal Assessment (20%). The internal assessment will be based on Sessional Examinations (10%), Assignments (5%) & Attendance (5%) for each paper. The External Examination will be through the routine annual university examination, based on 03 essay type questions (48 marks), 04 short questions (16 marks) and 08 very short answer type questions (16 marks).
3. During the first-year evaluation procedure for the practical as follows:
(a) Evaluation procedure for paper **(E 701)-EF 2: Practicum (A): Preparation to Function as a Teacher**, a board of two examiners comprising one as Internal Examiner of concerned department & second one as External Examiner from any other University. Examiners will assess student separately and average of total sum of marks will be his\her final score in teaching skill out of 80 external marks and internal marks 20 marks will be given by two subject supervisors.
(b) For evaluation procedure paper **(E 702)-Viva- Voce Examination** of 80 marks will be conducted by the board of examiners & internal 20 marks given by respective supervisors.
4. During the second year, evaluation procedure for the practical will be as follows:
(a) Evaluation procedure for paper **(E 703)- EF 2(B): School Internship**, a board of two examiners comprising one as Internal Examiner of concerned department & second one as External Examiner from any other University, will assess the journal ,the portfolio and the final presentation of teaching of students through PPT or OHP separately and average of total sum of marks will be her final score in teaching competence out of 160 external marks and internal 40 marks will be given by the subject supervisors .it will be divide as follows:
    i.   The Journal of 50 marks (10+40).
    ii.   The Portfolio of 50 marks (10+40).
    iii. Final presentation through PPT/OHP of each school subject 100 marks (20+80).
(b) Evaluation procedure for paper **(E 704)-Viva- Voce Examination** of 80 marks will be conduct by the board of examiners and internal 20 marks will be given by the respective supervisors.

5. Continuous and Comprehensive Evaluation (C.C.E)

(a) In each paper the continuous internal assessment system would have a weightage of 20% marks, while the yearly end examination shall have a weightage of 80% marks.

(b) The weightage of components in continuous internal assessment system will be as under:

-	Sessional Examination	10 %
-	Assignment and Presentation	05 %
-	Attendance	05 %

(c) It shall be the duty of the teacher/teachers to conduct Continuous and comprehensive Evaluation. In case more than one teacher is sharing the teaching work in a paper, each teacher shall evaluate independently but total weightage should be 20 %.

J. Attendance

The B.Ed. program shall be of duration of two academic years, which can be completed in a maximum of three year. The minimum attendance of student teacher shall have to be 75% for all course work and 90% for Practicum/School Internship.

School of Law and Constitutional Studies

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Law and Constitutional Studies

Ordinances, Regulations & Syllabus

For

Bachelor of Law (LLB) Three Year Programme Semester Pattern
(w.e.f. session 2022-23)

Revised and approved in the year 2022 (17th meeting Board of Studies

Programme Educational Objectives (PEOs)

PEO 1 To provide students with a comprehensive understanding of legal principles, doctrines, and the framework of laws governing various fields.

PEO 2 To develop the ability to critically analyze legal issues, interpret statutes, and apply legal reasoning to complex situations

PEO 3 To instill ethical values and professional integrity, ensuring that graduates adhere to the highest standards of legal practice and contribute to social justice and equity

PEO 4 To enhance oral and written communication skills, equipping students to present legal arguments persuasively and represent clients effectively in courts, tribunals, and other forums.

PEO 5 To cultivate strong legal research skills and foster an attitude of lifelong learning, enabling students to stay updated with legal developments and contribute to academic and professional discourses.

PEO 6 To prepare graduates to serve as legal professionals who address societal challenges, advocate for policy changes, and contribute to nation-building through leadership roles in the legal and judicial systems.

Programme Specific Objectives (PSO's)

PSO 1 To equip students with a thorough understanding of national and international legal systems, statutory laws, and judicial precedents

PSO 2 To develop practical skills such as drafting legal documents, conducting negotiations, and preparing case strategies for litigation and alternative dispute resolution mechanisms

PSO 3 To prepare students to use their legal knowledge for promoting social justice, providing legal aid to underprivileged sections of society, and contributing to the public interest.

PSO 4 To enable students to critically evaluate laws and policies, suggest legal reforms, and participate in legislative drafting processes to address contemporary social, economic, and environmental issues.

PSO 5 To provide opportunities for students to specialize in cutting-edge legal fields, such as intellectual property rights, cyber law, environmental law, or international trade law, catering to global demands.

PSO 6 To prepare students for careers in the judiciary, government services, or corporate law by providing insights into procedural laws, administrative processes, and governance mechanisms.

Programme Outcome Objectives (POO's)

POO 1 Graduates will acquire in-depth knowledge of legal concepts, principles, and procedures, enabling them to interpret and apply laws effectively in practical scenarios

POO 2 Graduates will demonstrate the ability to critically analyze legal issues, evaluate evidence, and develop reasoned arguments to solve complex legal problems.

POO 3 Graduates will exhibit ethical conduct, professionalism, and a commitment to justice in their legal practice, adhering to the standards of the legal profession

POO 4 Graduates will develop strong oral and written communication skills, enabling them to present legal arguments persuasively in courts, tribunals, and other professional settings.

POO 5 Graduates will use their legal expertise to address societal challenges, uphold human rights, and advocate for marginalized communities, contributing to social equity and justice.

POO 6 Graduates will demonstrate the ability to continuously update their legal knowledge and adapt to evolving legal landscapes, ensuring competence in the face of new challenges.

LL.B First Year

First Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB 101	Law of Contract I	4	0	0	4
LLB 103	Family Law I (Hindu law)	4	0	0	4
LLB 105	Constitutional Law I	4	0	0	4
LLB 107	Law of Torts Including M.V. Act & Consumer Protection Laws	4	0	0	4
LLB-109 LLB-109A LLB-109B LLB-109C LLB-109D	English Spanish-I German-I Chinese-I French-I	4	0	0	4
	Total	**20**	**0**	**0**	**20**

Bachelor of Law (LL.B)Second Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB 102	Law of Contract II	4	0	0	4
LLB 104	Family law II (Muslim Law)	4	0	0	4
LLB 106	Constitutional Law II	4	0	0	4
LLB 108	Law of Crimes (I.P.C.)	4	0	0	4
LLB 110	Environmental Law	4	0	0	4
	Total	**20**	**0**	**0**	**20**

LL.B SECOND YEAR

Third Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB-201	Jurisprudence	4	0	0	4
LLB-203	Law of Evidence	4	0	0	4
LLB-205	Law of Property	4	0	0	4
LLB-207	Public International Law	4	0	0	4
LLB-209	Intellectual Property Law	4	0	0	4
	Total	**20**	**0**	**0**	**20**

Fourth Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB 202	Administrative law	4	0	0	4
LLB 204	Company law	4	0	0	4
LLB 206	Labor Law I	4	0	0	4
LLB 208	Civil Procedure Code and Law of Limitation	4	0	0	4
LLB 210	Criminal Procedure Code and Law of Juvenile Justice and Probation of Offenders	4	0	0	4
	Total	**20**	**0**	**0**	**20**

LL.B THIRD YEAR

Fifth Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB 301	Interpretation of Statutes	4	0	0	4
LLB 303	U.P. Land Laws	4	0	0	4
LLB 305	Law of banking and Negotiable Instruments	4	0	0	4
LLB 307	Alternate Dispute Resolution	2	0	8	6
LLB 309	Professional Ethics and Professional Accounting System	2	0	8	6
	Total	16	0	0	24

Sixth Semester

Paper Code	SUBJECTS	L	T	P	Credit
LLB 302	English and Legal Language	4	0	0	4
LLB 304	Information Technology Law	4			4
LLB 306 LLB 308 LLB 310	Optional (Choose any one from the following) – a. Law Relating to Women b. Human Rights Law c. Law of Investment and Securities	4	0	0	4
LLB 312	Drafting Pleading and Conveyancing	1		6	4
LLB 314	Moot Court, Observation of trial, Pre – Trial preparation and Internship	--	--	8	4
	Total	13	0	14	20

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Law and Constitutional Studies

Ordinances, Regulations & Syllabus

For

Bachelor of Law (BA LLB) Five Year Integrated Programme (Semester Pattern)

(w.e.f. session 2014-15)

Programme Educational Objectives (PEO's)
- **PEO 1** Legal Expertise**:** Provide foundational knowledge of law and social sciences.
- **PEO 2** Professional Skills: Develop competence for diverse legal careers.
- **PEO 3** Ethics and Leadership: Cultivate ethical values and leadership in advocacy.
- **PEO 4** Lifelong Learning: Promote research and continuous education in law.
- **PEO 5** Social Responsibility: Encourage contributions to justice and societal welfare.

PSO

- **Programme Specific Objectives (PSO's)**

- **PSO 1** Develop a comprehensive understanding of substantive and procedural laws, constitutional principles, and their application to address complex legal issues in diverse contexts.

- **PSO 2** Integrate knowledge of humanities, social sciences, and law to analyze societal problems, foster critical thinking, and promote social justice.

- **PSO 3** Prepare for diverse legal careers by fostering skills in legal research, drafting, advocacy, and negotiation, while adhering to ethical and professional standards.

- **PSO 4** Cultivate an understanding of law as an instrument of social change, promoting equality, human rights, and sustainability in legal practices and policymaking.

- **PSO 5** Equip students to navigate the global legal environment, adapt to evolving legal challenges, and pursue continuous professional development to meet emerging societal needs.

POO

Programme Outcome Objectives (POO's)
- **POO 1** To acquire and apply legal knowledge to the complex socio-legal problems.
- **POO 2** To make students eligible to practice law in courts and industry.
- **POO 3** To engender professional skills required for legal practice such as argument, pleading, drafting, conveyancing etc.
- **POO 4** To conduct themselves with the highest professional ethics standards   in legal profession
- **POO 5** To develop skills in legal research, legal reasoning and aptitude, and apply it during the Programme and profession.

TEACHING SCHEME

BA.LL.B First Year

(First Semester)

Paper Code	SUBJECTS	L	T	P	CREDIT
BL – 101 BL-101A BL-101B BL-101C	English – I Communication Skills in English-I Personality Development-I Soft Skills-I	4	0	0	4
BL103 BL103A BL103B BL-103	History – I Sociology-I Understanding Contemporary Social Issues - I Social Institutions In India-I	4	0	0	4
BL – 105 BL-105A BL-105B BL-105C	Political Science – I Society and Gender-I Comparative Politics-I Political Theories-I	4	0	0	4
BL – 107	Law of Torts Including M. V. Act & Consumer Protection Laws	4	0	0	4
BL – 109	Law of Contract – I	4	0	0	4
BL-111 BL-111A BL-111B BL-111C	Economics – I Indian Economy-I Economics of Money and Banking/ Principle of Sustainable Finance-I	4	0	0	0
	Total	24	0	0	24

Second Semester

Paper Code	SUBJECTS	L	T	P	CREDIT
BL – 102 BL-102A BL-102B BL-102C	English – II Communication Skills in English II Personality Development-II Soft Skills-II	4	0	0	4
BL – 104 BL-104A BL-104B BL-104C	History – II Sociology-II Understanding Contemporary Social Issues-II Social Institutions In India-II	4	0	0	4
BL – 106 BL-106A BL-106B BL-106C	Political Science – II Society and Gender-II Comparative Politics-II Political Theories-II	4	0	0	4

BL – 108	Constitutional Law – I	4	0	0	4
BL – 110	Law of Contract – II	4	0	0	4
BL—112 BL—112A BL—112B BL—112C	Economics – II Indian Economy-II Economics of Money and Banking-II Principles of Sustainable Finance-II	4	0	0	0
	Total	24	0	0	24

BA.LL.B Second Year

Third Semester

Paper Code	SUBJECTS	L	T	P	Credit

BL –201	Constitutional Law – II	4	0	0	4
BL –203	Legal Methods	4	0	0	4
BL –205 BL –205A BL –205B BL –205C	Political Science – III Society and Gender-III Comparative Politics-III Political Theories-III	4	0	0	4
BL –207	History – III/ Sociology-III/Understanding Contemporary Social Issues-III/Social Institutions In India-III	4	0	0	4
BL –209 BL-209A BL-209B BL-209C	Microeconomics –I Economic Sociology-I Economic Geography-I Economic History-I	4	0	0	4
	Total	**20**	**0**	**0**	**20**

Fourth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-202	Human Rights Law	4	0	0	4
BL-204	Legal History	4	0	0	4
BL-206	Law of Evidence	4	0	0	4
BL-208	Law of Crimes (I.P.C.)	4	0	0	4
BL-210 BL-210A BL-210B BL-210C	Microeconomics- II Economic Sociology-II Economic Geography-II Economic History-II	4	0	0	4
	Total	**20**	**0**	**0**	**20**

BA.LL.B Third Year

Fifth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-301 BL-301A BL-301B BL-301C BL-301D	Hindi-I Spanish-I German-I Chinese-I French-I	4	0	0	4
BL-303	Family Law-I (Hindu Law)	4	0	0	4
BL -305	Civil Procedure Code and Law of Limitation	4	0	0	4
BL-307	Criminal Procedure Code and Law of Juvenile Justice and Probation of Offenders	4	0	0	4
BL-309 BL-309A BL-309B	Macroeconomics I Economic Anthropology-I Political Economy-I	4	0	0	4
	Total	**20**	**0**	**0**	**20**

BA, LLB Third Year

Sixth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL302 BL302A BL302B BL302C BL302D	Hindi-II Spanish-II German-II Chinese-II French-II	4	0	0	4
BL-304	Family Law-II (Muslim Law)	4	0	0	4
BL-306	Legal Language and Legal Writing	4	0	0	4
BL-308	Public International Law	4	0	0	4
BL-310 BL-310A BL-310B	Macroeconomics II Economic Anthropology- II Political Economy-II	4	0	0	4
	Total	**20**	**0**	**0**	**20**

BA.LL.B Fourth Year

Seventh Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-401	Labor Law-I	4	0	0	4
BL-403	Jurisprudence	4	0	0	4
BL-405	Company Law	4	0	0	4
BL-407	Administrative Law	4	0	0	4
BL-409 BL-409A BL-409B BL-409C BL409D	(Clinical Paper) Alternate Dispute Resolution Skill Enhancement Course: Practical (Qualifying course) Data Analysis-1 Computer Programming-1 Python Programming-1 Leadership and Management-1	2	0	8	6
	Total	**18**	**0**	**8**	**22**

Eighth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-402	Labor Law-II	4	0	0	4
BL-404	U.P. Land Laws	4	0	0	4
BL-406 BL-406A BL-406B	Intellectual Property Law Research Methodology Publication Ethics and Emerging Trends in Research	4	0	0	4
BL-408	Interpretation of Statutes	2	0	0	4
BL-410 BL-410A	Clinical Paper- II: Professional Ethics and Professional Accounting System **Skill Enhancement Course: Practical (Qualifying course)** Data Analysis-II	2	0	8	6

BL-410B	Computer Programming-II				
BL-410C	Python Programming-II				
BL-410D	Leadership and Management-II				
	Total	**18**	**0**	**8**	**22**

BA.LL.B Fifth Year

Ninth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-501	Law of Taxation Law	4	0	0	4
BL-505 BL-505A BL-505B BL-505C	Environmental Law Public Relations Global Politics Introduction to Sociology	4	0	0	4
BL-507	Law of Banking & Negotiable Instruments	4	0	0	4
BL-509 BL-509A BL-509B BL-509C	Clinical Paper-III Drafting, Pleading and Conveyance Body Language-I Presentation Skills-I Effective Writing Skills-I	2	0	8	6
BL-503	Law of Property **Total**	**4**	**0**	**0**	**4**
	Total	**18**	**0**	**8**	**22**

Tenth Semester

Paper Code	SUBJECTS	L	T	P	Credit
BL-502 BL-502A BL-502B BL-502C	Clinical paper-IV Moot Court, Observation of Trial & Pre Trial Preparation Body Language-II Presentation Skills-II Effective Writing Skills-II	2	0	8	6
BL- 504	Internship (Lawyer/Law Firms)	4	0	12	10
	Total	6	0	20	16

School of Business Studies and Entrepreneurship

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Business Studies & Entrepreneurship

Ordinances, Regulations & Syllabus

For

Masters of Business Administration (MBA) Two Year Programme Semester Pattern

(w.e.f. session 2013-14)

Master of Business Administration

(WEF Academic Session 2020-22)

Vision

NICE School of Business aims to become a Centre of Excellence through research and continuous innovation to nurture global managers, leaders and entrepreneurs for sustainable development by synthesizing Indian ethics with modern technology.

Mission

The Mission of NICE School of Business Studies is:

- To nurture global talent and develop Industry ready professionals and socially responsible leaders / to face the challenges of fast changing business environment.

- To achieve academic excellence in research, consulting, training and teaching by adopting best practices and cutting edge technologies.

- To promote continuous innovation and entrepreneurship.

- To encourage collaborations, cooperation and partnerships with all stake holders to meet sustainable development goals.

Program Educational Objectives (PEOs)

PEO1: Possess wide spectrum of managerial skills along with competency building qualities in specific areas of management and business studies.

PEO2: Select and apply appropriate tools for decision making required for ill structured managerial problems.

PEO3: Students will be able to independently conduct theoretical as well as applied research.

PEO4: To practice sound knowledge of the entrepreneurial process and inculcate creativity and innovation among students.

PEO5: Analyze ethical implications of business practices using advanced levels of ethical reasoning

Program Specific Objectives (PSOs)

PSO1: To enrich communication, ethical values, team work, professional and leadership skill sets of students.

PSO2: To integrate knowledge, skill and attitude that will sustain an environment of learning and creativity among the students with an assurance for good careers.

PSO3: Analyze the economic, social and environmental issues related to business.

PSO4: Ability to identify, explore and harness opportunities presented by emerging trends and changing business environment.
PSO5: Understand the leadership skills through internship training.

Program Outcomes Objectives (POOs)

PO1: Demonstrate the knowledge of management science to solve complex corporate problems using limited resources.

PO2: Apply ethical principles for making judicious management decisions.

PO3: To develop proactive thinking so as to perform effectively in the dynamic socio-economic and business ecosystem.

PO4: Identify business opportunities, entrepreneurship approach and skill sets.

PO5: Communicate effectively with various stakeholders.

MASTER OF BUSINESS ADMINISTRATION (MBA):
The M.B.A. course aims at providing inputs to the students relevant to the business industry and trade so that they can function in different organizations and face the challenges arising there from. The course not only aims at providing knowledge and skills in different areas of management, but also provides inputs necessary for the overall development of the personality of the students.
The structure of the Course is designed in a way that students have to study the core courses from different functional areas of management that are made compulsory. Later on, specializations are offered in functional areas where the students can opt for any one specialization out of the seven offered: Marketing, Finance, International Business, Operations Management, HRM, Pharma Business Management and Agri-Business Management. Right from the beginning of the course, the focus is on providing relevant inputs through case discussion/ analysis, simulation games, role-plays etc. keeping in mind the current business scenario.
Broadly, the course is of two years divided into four semesters, each semester having eight compulsory papers of 40 sessions each of one-hour duration. The students will have to opt for one functional areas for their specialization, each having fivepapers (three in third semester and two in the fourth semester from Specialization Papers).
Summer Training for 8/10 weeks is compulsory for every student pursuing the course, which they have to undergo at the end of second semester examination. Comprehensive viva and Research project are part of the course.

SUMMER TRAINING PROJECT REPORT:
1. At the end of second semester examination, every student of MBA will undergo on-the-job practical training in any manufacturing, service or financial organization. The training will be of 8 to 10 weeks duration. The College/Institute will facilitate this compulsory training for students.
2. During the training, the student is expected to learn about the organization and analyze and suggest solutions of a live problem. The objective is to equip the student with the knowledge of actual functioning of the organization and problems faced by them for exploring feasible solutions and suggestions.
3. During the course of training, the organization (where the student is undergoing training) will assign a problem/project to the student.
4. The student, after the completion of training will submit a report to the College/Institute, which will form part of third semester examination. However, the report must be submitted by the end of August during third semester so that it is evaluated well in time and third semester results are not delayed.
5. The report (based on training and the problem/project studied) prepared by the student will be known as Summer Training Project Report. The report should ordinarily be based on primary data. It should reflect in depth study of micro problem, ordinarily assigned by the organization where student undergoes training. Relevant tables and bibliography should support it.

One comprehensive chapter must be included about the organization where the student has undergone training. This should deal with brief history of the organization, its structure, performance products/services and problems faced. This chapter will form part I of the Report. Part II of the Report will contain the study of micro research problem.

The average size of Report ordinarily will be 100 to 150 typed pages in standard font size (12) and double spacing. Three neatly typed and soft bound (paperback) copies of the report will be submitted to the College/Institute. The report will be typed in A-4 size paper.

6. The Report will have two certificates. One by the Head of the Institute/College and the other by the Reporting Officer of the organization where the student has undergone training. These two certificates should be attached in the beginning of the report.

7. The report will be evaluated by two external examiners. It will carry total of 100 marks divided into written report of 50 marks and presentation of 50marks. There will be no internal examiner.
Only such persons will evaluate the project report who has minimum 3 years of experience of teaching MBA classes in a College/University. Experience of teaching MBA classes as guest faculty shall not be counted.

8. It is mandatory that the student will make presentation in the presence of teachers and students. The student is expected to answer to the queries and questions raised in such a meeting.

RESEARCH PROJECT REPORT:

In fourth semester, candidates will have to submit a Research Project Report on a problem/topic to be assigned by the School of Business Studies under the supervision of a core faculty member of the department. The research project report will carry 100 marks. The evaluation of the project report will be done by two external examiners. The average of the marks awarded by the two examiners will be taken into account for the results.

The report will contain the objectives and scope of the study. Research methodology, use, importance of the study, analysis of data collected, conclusions and recommendations. It will contain relevant charts, diagrams and bibliography. A certificate of the Supervisor and the Head of the MBA program certifying the authenticity of the report shall be attached therewith. The student will submit three copies of the report to the Head of the MBA program. The number of pages in the report will be 75 or more. The report should be typed in A-4 size paper.

COMPREHENSIVE VIVA:

The comprehensive viva voce is scheduled at the end of II &IV Semester in order to judge the understanding as well as application of the knowledge gained by the students by the end of 2nd&4th Semester of the course. This is also to see the articulation of what is being learnt by them. The idea is to see that students are able to understand what is being taught in two full year and see their relevance not only in the practical field but also their inter relationship. The viva voce is of 100 marks to be conducted by the external examiner appointed by the University.

Master of Business Administration (MBA)

PAPER CODE	SEMESTER I	CREDITS
MBA -101	Management Practices & Organization Behaviour	4
MBA -102	Economics Analysis for Business	4
MBA -103	Accounting for Managers	4
MBA -104	Quantitative Techniques for Managers	4
MBA -105	Legal Aspect of Business	4
MBA -106	Business Ethics	4
MBA -107	Personality Development & Communication Skills	4
MBA -107-A	Stress Management	
MBA -107-B	Introduction to Psychology	
MBA -107-C	Art of Happiness/ Yoga & Meditation	
MBA -108/ MBA-108A/ MBA-108B/ MBAC	Information Systems/ Fundamentals of Computer/ Data Analysis/Statistics, Computation and Applications	4
	TOTAL	32

PAPER CODE	SEMESTER II	CREDITS
MBA-201	Marketing Management	4
MBA-202	Financial Management	4
MBA-203	Human Resource Management	4
MBA-204	Production and Operations Management	4
MBA-205/MBA-205A	Research Methodology/ Publication Ethics	4
MBA-206	Business Environment	4
MBA-206-A	Nutrition & Well being	
MBA-206-B	Disaster Management	
MBA-206-C	Environmental Policy	
MBA-207	Corporate Image Building	4
MBA-208	Comprehensive Viva	4
	TOTAL	32

PAPER CODE	SEMESTER III	CREDIT
MBA- 301	Strategic Management	**4**
MBA- 302	International Business	**4**
MBA- 303	Supply Chain Management	**4**
MBA: 3MK1/HR1/FM1	Elective I	
MBA: 3MK2/HR2/FM2	Elective II	
MBA: 3MK3/HR3/FM3	Elective III	
MBA-304	**Summer Training Report and Viva Voce**	**8**
	Specialization Group:A Marketing	**4**
MBA-3MK1	Consumer Behaviour & Sales Management	
MBA-3MK2	Marketing of Non Profit Organization	
MBA-3MK3	Integrating Marketing Communication	
	Specialization Group:B Finance	**4**
MBA-3FM1	Security Analysis & Portfolio Management	
MBA-3FM2	Financial Markets & Services	
MBA-3FM3	Corporate Tax Planning	
	Specialization Group:C Human Resource Management	**4**
MBA-3HR1	Knowledge Management	
MBA-3HR2	Organizational Change & Development	
MBA-3HR3	Performance Management & Competency Mapping	
	TOTAL	**32**

PAPER CODE	SEMESTER IV	CREDITS
MBA-401	Entrepreneurship Development	4
MBA-402	Corporate Social Responsibility and Corporate Governance	4
MBA-403	E-Business	4
MBA-4MK4/HR4/FM4/AG4/IB4/OM4/PH4	Elective I	4
MBA-4MK5/HR5/FM5/AG5/IB5/OM5/PH5	Elective II	4
MBA-4OP4	Innovation Management and Startup Ecosystem	4
MBA-404	Research Project Report and Viva- Voce	4
MBA-405	Comprehensive Viva- Voce	4
	TOTAL	32

COURSE CODE	COURSE NAME
Specialization Group: Marketing	
COURSE CODE	**COURSE NAME**
MBA-4MK4	International Marketing
MBA-4MK5	Rural Marketing
Specialization Group: Finance	
COURSE CODE	**COURSE NAME**
MBA-4FM4	International Financial Management
MBA-4FM5	Project Planning and Evaluation
Specialization Group: HRM	
COURSE CODE	**COURSE NAME**
MBA-4HR4	Industrial Relations and Labour Laws
MBA-4HR5	Compensation Management
Specialization Group: International Business	
COURSE CODE	**COURSE NAME**
MBA-4IB4	Export Management and Documentation
MBA-4IB5	International Logistics Management
Specialization Group: Agri - Business Management	
COURSE CODE	**COURSE NAME**
MBA-4AG4	Management of Cooperatives
MBA-4AG5	Plantation Management
Specialization Group : Operations Management	
COURSE CODE	**COURSE NAME**
MBA-3OM4	Materials Management
MBA-3OM5	Total Quality Management and Quality Standards

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of Business Studies & Entrepreneurship

Ordinances, Regulations & Syllabus

For

Bachelor of Business Administration (BBA) Three Year Programme Semester Pattern
(w.e.f. session 2013-14)

Revised and Approved in the year 2021 (17th meeting, Board of Studies)

Programme Educational Objectives (PEOs)

PEO 1 Graduates will demonstrate a comprehensive understanding of core business concepts, including finance, marketing, management, and operations, enabling them to analyze and solve business problems effectively.

PEO 2 Graduates will apply critical thinking and analytical skills to make informed decisions in complex business environments, considering ethical and social implications.

PEO 3 Graduates will effectively communicate ideas and information in both written and verbal formats, demonstrating strong interpersonal skills necessary for teamwork and leadership roles.

PEO 4 Graduates will understand the impact of globalization on business practices and appreciate diverse perspectives, fostering inclusivity in the workplace.

PEO 5 Graduates will utilize current technologies and data analytics tools to enhance business operations and decision-making processes.

PEO 6 Graduates will cultivate an entrepreneurial mindset, demonstrating creativity and innovation in developing new business ideas and strategies.

PEO 7 Graduates will recognize the importance of ethical behavior and social responsibility in business, making decisions that contribute positively to society.

PEO 8 Graduates will embrace continuous learning and adaptability, equipping them to navigate the evolving business landscape throughout their careers.

Programme Specific Objectives (PSO's)

PSO 1 Equip students with a foundational understanding of various business functions, including marketing, finance, operations, and human resources.

PSO 2 Foster the ability to analyze complex business problems and make data-driven decisions using quantitative and qualitative methods.

PSO 3 Instill a sense of ethical responsibility and integrity in business practices, preparing students to be ethical leaders in their future careers.

PSO Improve both written and verbal communication skills, enabling students to effectively present ideas and collaborate in diverse teams.

PSO5 Inspire innovative thinking and the ability to recognize and capitalize on business opportunities in various environments.

PSO6 Provide an understanding of global business practices and cultural diversity, preparing students for careers in an interconnected world.

Programme Outcome Objectives (POO's)

POO 1 Demonstrate a comprehensive understanding of core business concepts, theories, and practices across various disciplines, including finance, marketing, management, and operations.

POO 2 Apply critical thinking and analytical skills to solve complex business problems and make informed decisions based on quantitative and qualitative data.

POO 3 Exhibit effective verbal and written communication skills, enabling clear presentation of ideas and persuasive arguments in diverse business contexts.

POO 4 Work effectively in teams, demonstrating leadership, interpersonal skills, and the ability to manage group dynamics to achieve common goals.

POO 5 Understand and apply ethical principles and social responsibility in business decision-making, recognizing the impact of business actions on society and the environment.

POO 6 Analyze and appreciate the impact of globalization on business practices and strategies, and demonstrate cultural awareness in diverse business environments.

POO 7 Utilize modern technology and information systems to enhance business operations, including data analysis tools and management software.

POO 8 Foster an entrepreneurial mindset by identifying opportunities, assessing risks, and developing innovative solutions to create value in the marketplace.

POO 9 Commit to ongoing personal and professional development, recognizing the importance of staying current with industry trends and advancements.

POO 10 Develop and implement effective business strategies that align with organizational goals and respond to market dynamics.

Course Structure

Ordinance and Regulations

BBA:FirstYearCourseStructure First Semester

SL.No.	Subject Code	Subject Name	Credit
1	BBN-101	Business Economics	4
2	BBN-102	Basic Accounting	4
3	BBN-103	Business Statistics	4
4	BBN-104	Principles of Management	4
5	BBN-105	Business Ethics & Governance	4
6	BBN-106/BBN-106A/BBN-106B/ BBN-106C	Computer Applications/Python/Fundamentals of Computer/Computer System Security	4
		Total	24

Year-1/Semester-II

SL.No.	Subject Code	Subject Name	Credit
1	BBN-201	Organization Behaviour	4
2	BBN-202	Business Finance	4
3	BBN-203	Human Resource Development	4
4	BBN-204	Marketing Theories & Practices	4
5	BBN-205	Business Mathematics	4
6	BBN-206/BBN-206A/BBN-206B/BBN-206C/BBN-206D	Advertising Management/ Fundamentals of Communication/Spreadsheet Essentials/Critical Thinking & Story Telling/ Critical Thinking for Decisions at Workplace	4
		Total	24

BBA:SecondYearCourseStructure Third Semester

SL.No.	Subject Code	Subject Name	Credit
1	BBN-301	Management & Cost Accounting	4
2	BBN-302/ BBN-302 B/ BBN-302C	Business Law/Tax Law/ Intellectual Property Law	4
3	BBN-303	Production Management	4
4	BBN-304	Business Policy	4
5	BBN-305	Business Communication/	4
5.1	BBN-305-A	Etiquate & Convesational Skills	
5.2	BBN-305-B	Personality Development	
5.3	BBN-305-C	Corporate Communication	
5.3	BBN-305-D	Professional Communication	
6	BBN-306	Business Environment	4
6.1	BBN-306-A	Disaster Management	
6.2	BBN-306-B/BBN-306C	Food & Nutrition/Environmental Studies	
		Total	24

BBA:Second Year Course Structure Fourth
Semester

SL.No.	Subject Code	Subject Name	Credit
1	BBN-401	Supply Chain Management	4
2	BBN-402/BBN-402A/BBN-402B	Research Methodology/Publication Ethics/Emerging	4
3	BBN-403	Specialised Accounting	4
4	BBN-404	Consumer Behaviour	4
5	BBN-405	Investment Analysis & Portfolio Management	4
6	BBN-406/ BBN-406A/ BBN-406B	Company Law/ Rural Sociology & Educational Psychology/ Science, Technology, and Society	4
		Total	24

BBA:ThirdYearCourseStructure Fifth Semester

SL.No.	Subject Code	Subject Name	Credit
1	BBN-501	Income Tax	4
2	BBN-502	Marketing Communication	4
2.1	BBN-502-A/ BBN-502B/ BBN-502C/ BBN-502D	Social Media Marketing/Perspectives on Contemporary Issues/Intelligent Automation/Creativity and Innovation	
3	BBN-503	Entrepreneurship & Small Business Management	4
4	BBN-504	Sales Management	4
5	BBN-505	Industrial Relations & Labour Laws	4
6	BBN-506	Company Accounts	4
		Total	24

BBA:ThirdYearCourseStructure Sixth Semester

SL.No.	Subject Code	Subject Name	Credit
1	BBN-601	Project Management	4
2	BBN-602	Goods & Service Tax	4
3	BBN-603	Auditing	4
4	BBN-604	International Trade	4
5	BBN-605	Strategic Mangement	4
6	BBN-606	Trainning & Development	4
		Total	**24**

School of Engineering and Technology

Shobhit University, Gangoh

(Established by UP Shobhit University Act No. 3, 2012)

School of School of Engineering and Technology

Ordinances, Regulations & Syllabus

For

Master of Engineering, Two Year Programme

Semester System

(w.e.f. session 2013-14)

Revised and approved in the year 2019 (13th Meeting, Board of Studies)

Programme Educational Objectives (PEOs)

PEO 1 To provide a strong foundation in advanced engineering principles, enabling students to develop innovative and efficient solutions for complex problems in their chosen field of specialization.

PEO 2 To foster research capabilities, encouraging students to explore emerging technologies, conduct independent research, and contribute to the development of new methodologies in engineering practices.

PEO 3 To develop critical thinking, analytical abilities, and problem-solving skills, equipping students to effectively apply engineering concepts to real-world challenges and deliver optimized solutions in professional environments.

PEO 4 To provide in-depth knowledge in specialized areas like Artificial Intelligence, Machine Learning, IoT, Robotics, and renewable energy, preparing students to lead advancements in these cutting-edge technologies.

PEO 5 To instill a strong sense of professional ethics, responsibility, and social consciousness, ensuring that graduates make informed decisions that positively impact society, the environment, and industry standards.

PEO 6 To enhance leadership, teamwork, and communication skills, preparing students to work collaboratively in multidisciplinary teams and effectively lead projects in diverse engineering and technology domains.

PEO 7 To ensure graduates are industry-ready by providing hands-on learning experiences, internships, and exposure to current industry practices, equipping them with practical skills for immediate contributions to engineering projects.

PEO 8 To promote lifelong learning and adaptability, preparing graduates to stay current with technological advancements and continuously upgrade their knowledge and skills throughout their professional careers in engineering.

Programme Specific Objectives (PSO's)

PSO 1 To equip students with advanced knowledge in core engineering subjects, enabling them to design, develop, and optimize systems and solutions for complex engineering challenges.

PSO 2 To develop expertise in emerging technologies such as Artificial Intelligence, Machine Learning, Internet of Things, and Robotics, preparing students to lead innovations in these high-demand fields.

PSO 3 To provide in-depth skills in research methodology, enabling students to conduct independent research, contribute to technological advancements, and develop novel solutions in their specialized areas.

PSO 4 To enhance problem-solving capabilities through practical applications, fostering the ability to analyze, design, and implement engineering systems that meet real-world technical and environmental challenges.

PSO 5 To instill a strong understanding of industry standards, quality control, and sustainable engineering practices, ensuring that students can contribute to projects with environmental and societal considerations.

PSO 6 To improve leadership, teamwork, and project management skills, preparing students to lead multidisciplinary teams and manage engineering projects efficiently in dynamic and diverse work environments.

PSO 7 To ensure mastery of advanced computational tools, simulation techniques, and design software, enabling students to model, analyze, and optimize engineering systems across various industries.

PSO 8 To promote ethical practices, professional integrity, and social responsibility, ensuring graduates understand the broader impact of engineering decisions and contribute positively to society, technology, and the environment.

Programme Outcome Objectives (POO's)

POO 1 Graduates will have a deep understanding of advanced engineering principles, enabling them to apply theoretical and practical knowledge to solve complex engineering problems across various domains.

POO 2 Graduates will demonstrate strong analytical, critical thinking, and problem-solving abilities, applying appropriate methodologies to design, analyze, and optimize solutions for real-world engineering challenges.

POO 3 Graduates will possess advanced research skills, enabling them to conduct independent research, contribute to innovation, and stay at the forefront of technological developments in their field.

POO 4 Graduates will be proficient in the use of modern engineering tools, software, and technologies to model, simulate, and optimize engineering systems and processes across diverse industries.

POO 5 Graduates will be able to design and develop engineering systems and solutions with an understanding of sustainability, environmental impact, and societal considerations, contributing to ethical engineering practices.

POO 6 Graduates will demonstrate strong leadership qualities, effective communication skills, and the ability to work collaboratively in multidisciplinary teams, ensuring successful project management and execution.

POO 7 Graduates will understand and apply industry best practices, standards, and ethical considerations, ensuring their engineering solutions adhere to regulatory requirements and contribute positively to society and the environment.

POO 8 Graduates will be capable of effectively managing engineering projects, demonstrating proficiency in planning, budgeting, resource management, and risk assessment to achieve project goals within deadlines and constraints.

POO 9 Graduates will engage in lifelong learning, adapting to evolving technologies and continuously upgrading their knowledge and skills to remain competitive and contribute meaningfully to the engineering profession.

POO 10 Graduates will demonstrate professional and ethical responsibility, making informed decisions with a focus on the long-term impact of engineering solutions, and positively influencing society and the global engineering community.

Shobhit University, Gangoh, Saharanpur
Department of Computer Engg.
M.Tech. (Computer Engineering)
(Teaching Scheme)

First Semester

Course No	Subject	L T P	Cr
CE- 501	Software Engineering Methodologies	3 – 1 – 0	4
CE- 503	Analysis and Design of Algorithms	3 – 1 – 0	4
CE- 505	Advanced Database Management Systems	3 – 1 – 0	4
CE- 507	Computer Communication and Networks	3 – 1 – 0	4
CE- 509	Fundamental of Computer Programming (Audit)	2 – 1 – 0	0
CE- 511	Fundamental of Mathematics (Audit)	2 – 1 – 0	0
CE- 511 A	Mathematics /		
CE- 511 B	Basic Mathematics /		
CE- 511 C	Mathematics-I		
CE- 551	Algorithms Lab	0 – 0 – 4	2
CE- 581	Seminar-I	0 – 0 – 3	2
		Total: 20	

Second Semester

Course No	Subject	L T P	Cr
CE- 502	Resource Management of Computer Systems	3 – 1 – 0	4
CE- 504	Soft Computing	3 – 1 – 0	4
CE- 506	High Performance Computer Architecture	3 – 1 – 0	4
	Elective –I (Choose any one)	3 – 1 – 0	4
CE-522	Mobile & Wireless Communication		
CE-524	Embedded System		
CE-526	Cloud Computing		
CE-552	Operating systems Lab	0 – 0 – 4	2
CE-582	Seminar-II	0 – 0 – 3	2
		Total: 20	

Third Semester

Course No	Subject	L T P	Cr
CE- 601	Data Mining and Warehousing	3 – 1 – 0	4
CE- 603	Internet and Web Technology	3 – 1 – 0	4
CE- 605	Medical Image Processing	3 – 1 – 0	4
CE- 607	Software Verification, Validation and Testing	3 – 1 – 0	4
	Elective –II (Choose any one)	3 – 1 – 0	4
CE-623	Security of Information System		
CE-625	Network Security		
CE-671	Minor Project	0 – 0 – 8	2
CE-681	Seminar-III	0 – 0 – 3	2
		Total: 20	

Fourth Semester
CE- 692   Dissertation   **0 – 0 – 28   14**

Total: 14
Grand Total: 74

Shobhit University, Gangoh

School of School of Engineering and Technology

Ordinances, Regulations & Syllabus

For

Bachelor of Engineering, Four Year Programme

Semester System

I

(w.e.f. session 2013-14)

Revised and approved in the year 2021 (17th Meeting, Board of Studies)

Programme Educational Objectives (PEOs)

PEO 1 Graduates will acquire a strong foundation in engineering principles, enabling them to design, develop, and implement innovative solutions to complex engineering problems across various industries.

PEO 2 Graduates will develop the ability to apply critical thinking, problem-solving skills, and engineering techniques to analyze, evaluate, and resolve real-world challenges in their chosen engineering discipline.

PEO 3 Graduates will gain hands-on experience in using modern engineering tools, software, and technologies, enabling them to effectively design, model, and optimize engineering systems and processes.

PEO 4 Graduates will demonstrate the ability to work collaboratively in multidisciplinary teams, manage engineering projects, and communicate technical information effectively to both technical and non-technical stakeholders.

PEO 5 Graduates will adhere to professional and ethical standards, ensuring their engineering solutions are socially responsible, environmentally sustainable, and aligned with industry best practices and regulatory requirements.

PEO 6 Graduates will develop leadership and management skills, preparing them to take on roles of responsibility in both technical and managerial aspects of engineering projects.

PEO 7 Graduates will engage in lifelong learning and stay current with emerging technologies, ensuring continuous professional growth and adaptability to the evolving engineering landscape.

PEO 8 Graduates will contribute to the betterment of society by creating innovative solutions that address societal challenges, promote sustainable development, and enhance the quality of life globally.

Programme Specific Objectives (PSO's)

PSO 1 To equip students with a solid foundation in core engineering concepts, preparing them to design, analyze, and develop solutions for complex technical challenges in various fields.

PSO 2 To develop proficiency in modern engineering tools, techniques, and technologies, enabling students to effectively design, model, and optimize engineering systems and processes across diverse applications.

PSO 3 To enhance problem-solving skills, encouraging students to apply engineering principles and critical thinking to develop innovative and sustainable solutions for real-world challenges in their discipline.

PSO 4 To foster a strong understanding of professional ethics, environmental sustainability, and social responsibility, ensuring students create engineering solutions that are both technically sound and socially beneficial.

PSO 5 To provide hands-on experience through laboratory work, internships, and projects, helping students gain practical exposure to the application of engineering concepts in real-world scenarios.

PSO 6 To nurture teamwork, leadership, and communication skills, preparing students to effectively collaborate in multidisciplinary teams, manage engineering projects, and communicate complex ideas to diverse audiences.

PSO 7 To ensure students develop a global perspective on engineering practices, preparing them to adapt and innovate in response to technological advancements and the needs of a rapidly changing world.

PSO 8 To foster lifelong learning habits, ensuring students remain adaptable and stay updated with the latest trends, technologies, and advancements in their engineering field throughout their careers.

Programme Outcome Objectives (POO's)

POO 1 Graduates will have a strong foundation in engineering fundamentals, enabling them to apply core principles and methodologies to solve real-world engineering problems across various disciplines.

POO 2 Graduates will possess the ability to analyze complex engineering systems, design innovative solutions, and optimize processes while considering technical, environmental, and societal constraints.

POO 3 Graduates will be proficient in using modern engineering tools, software, and technologies to model, simulate, and solve engineering problems, ensuring efficient and effective system designs.

POO 4 Graduates will develop critical thinking, problem-solving, and decision-making skills to address engineering challenges, ensuring that solutions are feasible, sustainable, and aligned with industry standards.

POO 5 Graduates will demonstrate the ability to work effectively in multidisciplinary teams, manage projects, and communicate technical information clearly to diverse audiences, both within and outside of engineering fields.

POO 6 Graduates will adhere to ethical, professional, and legal standards in engineering practice, ensuring their solutions positively impact society, the environment, and the global engineering community.

POO 7 Graduates will be capable of undertaking independent research, applying engineering principles to explore new solutions, and contributing to advancements in technology and engineering practices.

POO 8 Graduates will have strong leadership and interpersonal skills, enabling them to manage engineering projects, lead teams, and coordinate with stakeholders to achieve desired outcomes.

POO 9 Graduates will demonstrate an understanding of sustainability, applying green engineering principles to minimize the environmental impact of their designs and promote socially responsible engineering practices.

POO 10 Graduates will embrace lifelong learning, continuously updating their knowledge and skills to stay relevant with evolving technologies, methodologies, and trends in engineering, ensuring professional growth throughout their careers.

Scheme of Teaching
TEACHING SCHEME OF B.TECH. 1ST YEAR (1ST SEMESTER)
W.E.F. Academic Session 2021-22
(COMMON FOR ALL BRANCHES)

CODE	SUBJECT	CREDIT	L	T	P
CMAN-101 CMAN-101 A/ CMAN-101 B/ CMAN-101 C/ CMAN-101 D	MATHEMATICS-I MATHEMATICS / BASIC MATHEMATICS / APPLIED MATHEMATICS / ADVANCED APPLIED MATHEMATICS	4	3	1	0
CMEN-101 CMEN-101 A/ CMEN-101 B/ CMEN-101 C/ CMEN-101 D	ENGINEERING MECHANICS STRUCTURAL ANALYSIS/ RIGID BODY MECHANICS/ FLUID MECHANICS/ FREE-BODY DIAGRAMS MECHANICS	4	3	1	0
CECN-101 CECN-101 A/ CECN-101 B/ CECN-101 C/ CECN-101 D	FUNDAMENTALS OF ELECTRONICS / ANALOG ELECTRONICS/ DIGITAL ELECTRONICS/ ELECTRONICS MEASUREMENT AND TESTING/ ELECTROMAGNETICS	4	3	1	0
CESN-101 CESN-101 A/ CESN-101 B/ CESN-101 C CESN-101 D	ENGINEERING CHEMISTRY AND ENVIRONMENTAL SCIENCE CHEMICAL THERMODYNAMICS/ CHEMICAL KINETICS/ ENVIRONMENTAL CHEMISTRY/ NATURAL RESOURCE MANAGEMENT	4	3	1	0
CPCN-101 CPCN-101 A/ CPCN-101 B/ CPCN-101 C/ CPCN-101 D	PRESENTATION AND COMMUNICATION SKILLS ENGLISH COMMUNICATION / ENGLISH / TECHNICAL COMMUNICATION / HUMAN VALUES, DEADDICTION AND TRAFFIC RULES	3	3	0	0
CMEN-151	ENGINEERING WORKSHOP PRACTICE	1	0	0	2
CMEN-153	ENGINEERING GRAPHICS LAB	1	0	0	2
CPCN-151 CPCN-151 A CPCN-151 B CPCN-151 C CPCN-151 D	COMMUNICATION LAB ENGLISH COMMUNICATION LAB / ENGLISH LAB / TECHNICAL COMMUNICATION LAB / HUMAN VALUES, DEADDICTION AND TRAFFIC RULES (LAB)	1	0	0	2
TOTAL		22	15	4	6

TEACHING SCHEME OF B.TECH. 1ST YEAR (2ND SEMESTER)
W.E.F. Academic Session 2021-22

CODE	SUBJECT	CREDIT	L	T	P
CMAN-102	MATHEMATICS-II	4	3	1	0
CMAN-102 A	Differential Equations/				
CMAN-102 B	Probability and Statistics/				
CMAN-102 C	Mathematical Logic/				
CMAN-102 D	Differential Geometry				
CPHN -102	ENGINEERING PHYSICS	4	3	1	0
CPHN -102 A	CLASSICAL MECHANICS/				
CPHN -102 B	ELECTROMAGNETIC THEORY/				
CPHN -102 C	QUANTUM MECHANICS/				
CPHN -102 D	SOLID STATE PHYSICS				
CCSN-102	COMPUTER FUNDAMENTALS AND PROGRAMMING USING-C	4	3	1	0
CEEN-102	BASICS OF ELECTRICAL ENGINEERING	4	3	1	0
CEEN-102 A	CIRCUIT THEORY/				
CEEN-102 B	ELECTROMAGNETISM/				
CEEN-102 C	DIGITAL ELECTRONICS/				
CEEN-102 D	ELECTRICAL MEASUREMENTS AND INSTRUMENTATION				
CPCN-102	TECHNICAL COMMUNICATION	3	3	0	0
CPCN-102 A	BUSINESS COMMUNICATION/				
CPCN-102 B	PRESENTATION SKILLS/				
CPCN-102 C	DIGITAL COMMUNICATION/				
CPCN-102 D	AUDIENCE ANALYSIS				
CPHN-152	ENGINEERING PHYSICS LAB	1	0	0	2
CPHN-152A	CLASSICAL MECHANICS LAB /				
CPHN-152B	ELECTROMAGNETIC THEORY LAB /				
CPHN-152C	QUANTUM MECHANICS LAB /				
CPHN-152D	SOLID STATE PHYSICS LAB				
CCSN-152	COMPUTER PROGRAMMING USING C LAB	1	0	0	2
CEEN-152	BASIC ELECTRICAL ENGINEERING LAB	1	0	0	2
CEEN-152A	CIRCUIT THEORY LAB /				
CEEN-152B	ELECTROMAGNETISM LAB /				
CEEN-152C	DIGITAL ELECTRONICS LAB /				
CEEN-152D	ELECTRICAL MEASUREMENTS AND INSTRUMENTATION LAB				
TOTAL		22	15	4	6

SHOBHIT UNIVERSITY, GANGOH (SAHARANPUR)
TEACHING SCHEME
W.E.F. Academic Session 2021-22
B. TECH. (COMPUTER SCIENCE & ENGINEERING)
III semester

Code	Course Title	Cr.	L	T	P
CCSN-201	DATA STRUCTURE USING 'C'	4	3	1	0
CCSN-203	DBMS	4	3	1	0
CCSN-205	OPERATING SYSTEMS (UNIX PROGRAMMING)	4	3	1	0
CCSN-207	JAVA PROGRAMMING	4	3	1	0
CCSN-XXX	PROFESSIONAL ELECTIVE-I	4	3	1	0
CBSN-201 CBSN-201 A CBSN-201 B CBSN-201 C	VALUE EDUCATION, HUMAN RIGHTS ANDLEGISLATIVE PROCEDURES HUMANITIES AND SCIENCE PUBLIC POLICY LEADERS FOR GLOBAL OPERATIONS	2	2	0	0
CCSN-251	DATA STRUCTURE USING 'C' LAB	1	0	0	2
CCSN-253	DBMS LAB	1	0	0	2
CCSN-255	JAVA PROGRAMMING LAB	1	0	0	2
	Total	25	17	5	6

PROFESSIONAL ELECTIVE-I
1. CCSN 209   DISCRETE MATHEMATICS
   CCSN 209 A   MATHEMATICS
   CCSN 209 B   BASIC MATHEMATICS
   CCSN 209 C   MATHEMATICS-I
   CCSN 209 D   Advanced Applied Mathematics
1. CCSN 211   PERL PROGRAMMING
2. CCSN 213   INTRODUCTION TO SOFT COMPUTING (Neural Networks, Fuzzy Logic and Genetic Algorithm)
3. CCSN 215   MATLAB PROGRAMMING FOR ENGINEERS

SHOBHIT UNIVERSITY, GANGOH (SAHARANPUR)
TEACHING SCHEME
W.E.F. Academic Session 2021-22
B. TECH. (COMPUTER SCIENCE & ENGINEERING)
IV semester

Code	Course Title	Cr.	L	T	P
CCSN-202	OBJECT ORIENTED PROGRAMMING USING C++	4	3	1	0
CCSN-204	DESIGN AND ANALYSIS OF ALGORITHMS	4	3	1	0
CCSN-206	INTERNET AND WEB TECHNOLOGY	4	3	1	0
CCSN-208	COMPUTER NETWORKS	4	3	1	0
CCSN-XXX	PROFESSIONAL ELECTIVE-II	4	3	1	0
CBSN-202	TECHNICAL ENGLISH	2	2	0	0
CBSN-202A	BUSINESS COMMUNICATION				
CBSN-202B	TECHNICAL WRITING				
CBSN-202C	INTERCULTURAL COMMUNICATION				
CCSN-252	OBJECT ORIENTED PROGRAMMING USING C++ LAB	1	0	0	2
CCSN-254	DESIGN AND ANALYSIS OF ALGORITHMS LAB	1	0	0	2
CCSN-256	INTERNET AND WEB TECHNOLOGY LAB	1	0	0	2
	Total	25	17	5	6

PROFESSIONAL ELECTIVE-II
1. CCSN 210   FORMAL LANGUAGES & AUTOMATION THEORY
2. CCSN 212   NANO SCIENCES

INDUSTRIAL ENHANCEMENT ELECTIVE-I
1. CBSN-202   TECHNICAL ENGLISH
2. CBSN-202 A   BUSINESS COMMUNICATION
3. CBSN-202 B   TECHNICAL WRITING
4. CBSN-202 C   INTERCULTURAL COMMUNICATION
5. CBSN-204   OPERATIONS RESEARCH

SHOBHIT UNIVERSITY, GANGOH (SAHARANPUR)
TEACHING SCHEME
W.E.F. Academic Session 2021-22
B. TECH. (COMPUTER SCIENCE & ENGINEERING)
V semester

Code	Course Title	Cr.	L	T	P
CCSN-301	SOFTWARE ENGINEERING	4	3	1	0
CCSN-303	COMPILER DESIGN	4	3	1	0
CCSN-305	OBJECT ORIENTED ANALYSIS AND DESIGN	4	3	1	0
CCSN-XXX	PROFESSIONAL ELECTIVE-III	4	3	1	0
CUCS-XXX	OPEN ELECTIVE-I	4	3	1	0
CBSN-301	ENERGY STUDIES	2	2	0	0
CBSN-301A	SUPPLY CHAIN MANAGEMENT				
CBSN-301B	TRANSPORTATION				
CBSN-301C	ENVIRONMENT AND SUSTAINABILITY				
CCSN-351	SOFTWARE ENGINEERING LAB	1	0	0	2
CCSN-353	COMPILER DESIGN LAB	1	0	0	2
CCSN-355	OBJECT ORIENTED ANALYSIS AND DESIGN LAB	1	0	0	2
	Total	25	17	5	6

PROFESSIONAL ELECTIVE-III
1. CCSN 307   CRYPTOGRAPHY & INFORMATION SECURITY
2. CCSN 309   INTERNET WEB PROGRAMMING
3. CCSN 311   GRAPH THEORY

OPEN ELECTIVE-I
1. CUCS 341   COMPUTER VISION
2. CUCS 343   ROBOTICS AND AUTOMATION
3. CUCS 345   CLOUD COMPUTING
4. CUCS 347   HUMAN COMPUTER INTERFACE

SHOBHIT UNIVERSITY, GANGOH (SAHARANPUR)
TEACHING SCHEME
W.E.F. Academic Session 2021-22
B. TECH. (COMPUTER SCIENCE & ENGINEERING)
VI Semester

Code	Course Title	Cr.	L	T	P
CCSN-302	COMPUTER GRAPHICS	4	3	1	0
CCSN-304	DATA WAREHOUSING & DATA MINING	4	3	1	0
CCSN-306	MOBILE COMPUTING	4	3	1	0
CCSN-XXX	PROFESSIONAL ELECTIVE-IV	4	3	1	0
CUCS-XXX	OPEN ELECTIVE-II	4	3	1	0
CBSN-302 CBSN-302A CBSN-302B CBSN-302C	ENVIRONMENTAL STUDIES ENVIRONMENTAL SCIENCE NATURAL RESOURCE MANAGEMENT POLLUTION CONTROL	2	2	0	0
CCSN-352	COMPUTER GRAPHICS LAB	1	0	0	2
CCSN-354	DATA WAREHOUSING & DATA MINING LAB	1	0	0	2
CCSN-356	MINI PROJECT	1	0	0	2
	Total	25	17	5	6

PROFESSIONAL ELECTIVE-IV
1. CCSN 308   KNOWLEDGE MANAGEMENT & EXPERT SYSTEM
2. CCSN 310   EMBEDDED COMPUTING SYSTEMS
3. CCSN 312   SIMULATION AND MODELING
4. CCSN 314   APPROXIMATION OF ALGORITHMS

OPEN ELECTIVE-II
1. CUCS 342   SOFTWARE PROJECT MANAGEMENT
2. CUCS 344   MICROWAVE ENGINEERING
3. CUCS 346   SUPPLY CHAIN MANAGEMENT-PLANNING
4. CUCS 348   SOFTWARE TESTING

SHOBHIT UNIVERSITY, GANGOH (SAHARANPUR)
TEACHING SCHEME
W.E.F. Academic Session 2021-22
B. TECH. (COMPUTER SCIENCE & ENGINEERING)
VII Semester

Code	Course Title	Cr.	L	T	P
CCSN-401	ARTIFICIAL INTELLIGENCE	4	3	1	0
CCSN-403	DISTRIBUTED COMPUTING SYSTEMS	4	3	1	0
CCSN-405	ADVANCED COMPUTER SYSTEM ARCHITECTURE	4	3	1	0
CCSN-XXX	PROFESSIONAL ELECTIVE-V	4	3	1	0
CUCS-XXX	OPEN ELECTIVE-V	4	3	1	0
CBSN-401 CBSN-401 A CBSN-401 B CBSN-401 C CBSN-401 D	LAW FOR ENGINEERS INTELLECTUAL PROPERTY RIGHTS EMPLOYMENT LAW DISPUTE RESOLUTION AND LITIGATION ENVIRONMENTAL LAW	2	2	0	0
CCSN-451	ARTIFICIAL INTELLIGENCE LAB	1	0	0	2
CCSN-453	DISTRIBUTED COMPUTING SYSTEMS LAB	1	0	0	2
CCSN-481	SEMINAR & GROUP DISCUSSION	1	0	0	2
	Total	25	17	5	6

PROFESSIONAL ELECTIVE-V
1. CCSN 407   DIGITAL IMAGE PROCESSING
2. CCSN 409   MULTIMEDIA COMPUTING
3. CCSN 411   PATTERN RECOGNITION
4. CCSN 413   C# Programming

OPEN ELECTIVE-III
1. CUCS 441   CLIENT-SERVER COMPUTING
2. CUCS 443   NEURAL NETWORK
3. CUCS 445   ENGINEERING SYSTEM MODELING AND SIMULATION
4. CUCS 447   COMPUTER BASED NUMERICAL & STATISTICAL TECHNIQUES

VIII Semester

Code	Course Title	Cr.	L	T	P
CCSN-462	INTERNSHIP AND Report Presentation	20	0	0	40

Shobhit University, Gangoh

School of School of Engineering and Technology

Ordinances, Regulations & Syllabus

For

Master of (MCA), Two Year Programme

Semester System
(W.e.f. session 2013-14)

Revised and approved in the year 2021 (17th Meeting, Board of Studies)

Programme Educational Objectives (PEOs)

PEO 1 To provide a strong foundation in computer science and software engineering, enabling students to develop, design, and implement advanced IT solutions for complex challenges.

PEO 2 To enhance critical thinking and problem-solving abilities, allowing graduates to analyze, design, and optimize algorithms and systems for real-world applications in diverse domains.

PEO 3 To develop leadership skills, effective communication, and teamwork capabilities, preparing students to manage projects and lead multidisciplinary teams in delivering innovative IT solutions.

PEO 4 To foster research skills and encourage innovation, enabling students to explore emerging technologies and contribute to advancements in software development and computer science.

PEO 5 To promote ethical behavior, professional integrity, and continuous learning, ensuring graduates stay adaptable and contribute positively to the evolving IT industry throughout their careers.

PEO 6 To nurture leadership qualities, communication skills, and teamwork, preparing students to manage projects and collaborate effectively within multidisciplinary teams, ensuring success in software development and IT management.

PEO 7 To instill a sense of ethical responsibility, professionalism, and integrity, ensuring that graduates understand the societal impact of technology and contribute positively to the global IT community.

PEO 8 To promote lifelong learning and adaptability, preparing graduates to continually update their skills, stay current with emerging technologies, and remain competitive in an ever-evolving IT landscape.

Programme Specific Objectives (PSO's)

PSO 1 To develop proficiency in designing, implementing, and testing software applications using modern programming languages, frameworks, and tools to address complex computational problems.

PSO 2 To equip students with advanced knowledge of computer networks, protocols, and cybersecurity, enabling them to design secure, scalable, and efficient networked systems.

PSO 3 To provide expertise in database management, data structures, and data analysis, empowering students to design efficient data-driven applications for real-world business and scientific solutions.

PSO 4 To explore emerging technologies such as Artificial Intelligence, Machine Learning, Cloud Computing, and Big Data, preparing students to innovate and apply these technologies in various domains.

PSO 5 To cultivate strong analytical and problem-solving skills, enabling students to conduct research and develop innovative solutions to complex problems in software engineering and IT.

PEO 6 To develop expertise in software testing methodologies, debugging, and quality assurance processes, ensuring that software applications meet industry standards and perform reliably in diverse environments.

PEO 7 To enhance students' communication and interpersonal skills, preparing them for effective teamwork, leadership, and technical presentations in multidisciplinary, collaborative software development environments.

PEO 8 To instill a strong sense of professional ethics and a commitment to lifelong learning, ensuring students can adapt to technological advancements and contribute positively to the IT industry

POO 1 Graduates will demonstrate a solid understanding of computer science fundamentals, software engineering principles, and IT solutions to address complex real-world problems across various domains.

POO 2 Students will possess advanced problem-solving skills, applying analytical and computational methods to design efficient algorithms and software solutions for technical challenges.

POO 3 Graduates will be proficient in designing, developing, testing, and deploying software applications using modern programming languages, frameworks, and software engineering methodologies.

POO 4 Students will gain expertise in database design, management, and optimization, and will be able to create efficient database systems for storing and retrieving data.

POO 5 Graduates will be adept in utilizing emerging technologies such as AI, Machine Learning, Cloud Computing, and Big Data to innovate and solve modern-day challenges.

POO 6 Students will understand networking protocols, communication models, and security principles to design and manage secure, efficient computer networks and distributed systems.

POO 7 Graduates will adhere to ethical standards and demonstrate professional conduct in their practice, ensuring responsibility, accountability, and respect in all computing-related endeavors.

POO 8 Students will develop strong research skills, contributing to the advancement of technology through innovative solutions and exploration of new computational techniques and methodologies.

POO 9 Graduates will possess effective communication skills, enabling them to work collaboratively in multidisciplinary teams, share ideas clearly, and present technical information effectively to stakeholders.

POO 10 Graduates will engage in lifelong learning, continuously updating their knowledge and adapting to new technologies, methodologies, and industry trends to remain competitive in the evolving IT landscape.

I semester

Code	Course Title	Cr.	L	T	P
MCA-101	Java	4	3	1	0
MCA-102	Advanced DBMS	4	3	1	0
MCA-103	Advanced DAA	4	3	1	0
MCA-104	Network Fundamentals	4	3	1	0
MCA-133 MCA-133 A/ MCA-133 B/ MCA-133 C/ MCA-133 D	Optimization Techniques / Elements of Statistics / Combinatorial Optimization Multi-objective Optimization Biostatistics	4	3	1	0
MCA-151	Lab JAVA	2	0	0	2
MCA-152	Lab Advanced DBMS	2	0	0	2
MCA-153	Lab Design and analysis of Algorithm	24	15	5	4

PROFESSIONAL ELECTIVE-I

1. MCA-131   Mobile Computing
2. MCA-132   Theory of Computation
3. MCA-133   Optimization techniques
4. MCA-134   Data Warehousing and Data Mining

II semester

Code	Course Title	Cr.	L	T	P
MCA-201	Software Engineering & Project Management	4	3	1	0
MCA-202	ASP .Net	4	3	1	0
MCA-203	Python	4	3	1	0
MCA-204	Artificial Intelligence	4	3	1	0
MCA-231	Distributed Operating System	4	3	1	0
MCA-251	Lab Software Engineering and Project Management	2	0	0	2
MCA-252	Lab ASP. Net	2	0	0	2
MCA-253	Lab Python	2	0	0	2
	Total	26	15	5	6

PROFESSIONAL ELECTIVE-II

1. MCA-231   Distributed Operating System
2. MCA-232   Embedded System
3. MCA-233   Linux/ Unix

OPEN ELECTIVE
1. MCA-241   Cloud Computing
2. MCA-241 A   Digital Electronics
3. MCA-241 B   Business Communication

III semester

Code	Course Title	Cr.	L	T	P
MCA-301	PHP	4	3	1	0
MCA-302	Data Science	4	3	1	0
MCA-304	Cryptography and Network Security	4	3	1	0
MCA-332	Compiler Design	4	3	1	0
MCA-351	Lab PHP	2	0	0	2
MCA-352	Lab Data Science	2	0	0	2
MCA-353	Lab Cryptography and Network Security	2	0	0	2
MCA-354	Minor Project	4	0	0	2
MCA-355	Seminar Based on Learning	2	0	0	2
	Total	24	9	3	10

PROFESSIONAL ELECTIVE-III

1. MCA-331   Soft Computing
2. MCA-332   Compiler Design

OPEN ELECTIVE

1. MCA-303   Android Programming
2. MCA-304   Cryptography and Network Security
3. MCA-304 A   Professional Ethics and Social Responsibility for Sustainability
4. MCA-304 B   Enterprise Resource Planning
5. MCA-305 C   Software Project Planning and Management
6. MCA-306 D   Internet of Everything

IV semester

Code	Course Title	Cr.	L	T	P
MCA-462	MAJOR PROJECT PRESENTATION & VIVA	24	-	-	-

Shobhit University, Gangoh

School of School of Engineering and Technology

Ordinances, Regulations & Syllabus

For

Bachelor of Computer Application (BCA) Three Year Programme

Semester System

(w.e.f. session 2013-14)

Revised and approved in the year 2021 (17th Meeting, Board of Studies)

Programme Educational Objectives (PEOs)

PEO1: To facilitate in development of strong basic fundamentals of Computer Applications that fit as a perfect foundation towards a beginning a professional career in industry.

PEO2: To develop programming skills in learners by using fundamental knowledge of computer Science.

PEO3: To apply new designs and solutions to complex real life problems using existing and/or novel technologies.

PEO4: To play a creative role during professional life through turning problems to opportunities and foster personal and organizational growth

PEO5: To inculcate comprehensive communication ability that is useful during professional communication and leading of teams in future

Programme Specific Objectives (PSO's)

PSO 1 Students will able to understand, analyze and develop computer programs in the areas related to algorithm, web design and networking for efficient design of computer based system.

PSO 2 Apply standard software engineering practices and strategies in software project development using open source programming environment to deliver a quality of product for business success.

PSO 3 Student will able to know various issues, latest trends in technology development and thereby innovate new ideas and solutions to existing problems.

PSO 4 Analyze and design solutions for real-world problems using computational techniques.

PSO 5 Explore trends in AI, Machine Learning, Cloud Computing, and Big Data.

Programme Outcome Objectives (POO's)

PO1: Understand the concepts of key areas in computer science.

PO2: Analyze and apply latest technologies to solve problems in the areas of computer applications.

PO3: Analyze and synthesis computing systems through quantitative and qualitative techniques

PO4: Apply technical and professional skills to excel in business.

PO5: Communicate effectively in both verbal and written form.

PO6: Develop practical skills to provide solutions to industry, society and business.

PO7: Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.

PO8: Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.

Shobhit University, Gangoh (Saharanpur)
Teaching Scheme
Effective from 2021

BCA
I Semester

Subject Code	Subject	L	P	Cr.
BCA-101	Fundamental of Computer and C Programming	4		4
BCA-102	Problem Solving using Computer	4		4
BCA-103 BCA-103 A / BCA-103 B / BCA-103 C	Professional Communication / English / Technical Communication / Human Values, Deaddiction and Traffic Rules	4		4
BCA-104 BCA-104 A / BCA-104 B / BCA-104 C	Mathematics / Basic Mathematics / Mathematics-I / Advanced Applied Mathematics	4		4
BCA-151	Fundamental of Computer and C Programming Lab		2	2
BCA-152	Software Lab using Python		2	2
BCA-153 / BCA-153 A/ BCA-153 B/ BCA-153 C	English Communication Lab / English / Technical Communication / Human Values, Deaddiction and Traffic Rules (Lab)		2	2
BCA-154	Seminar Based on Learning		2	2
	Total Credits (4 Theory + 3 Lab)	**16**	**8**	**24**

II Semester

Subject Code	Subject	L	P	Cr.
BCA-201	OOPS Using C++	4		4
BCA-202	Database Management Systems	4		4
BCA-203	Web & E-Commerce Technologies	4		4
BCA-204 / BCA-204 A / BCA-204 B / BCA-204 C	Discrete Structures / Set Theory / Graph Theory / Discrete Probability	4		4
BCA-205 / BCA-205 A / BCA-205 B / BCA-205 C	Environmental Studies / Environmental Science / Natural Resource Management / Pollution Control	4		4
BCA-251	OOPS Using C++ Lab		2	2
BCA-252	Database Management Systems Lab		2	2
BCA-253	Seminar Based on Learning		2	2
	Total Credits (5 Theory + 2 Lab)	**20**	**6**	**26**

Shobhit University, Gangoh (Saharanpur)
Teaching Scheme
Effective from 2021

BCA
III Semester

Subject Code	Subject	L	T	P	Cr.
BCA-301	Operating Systems	4			4
BCA-302	HTML, DHTML and CSS Programming	4			4
BCA-303	Theory of Computation	4			4
BCA-304	Multimedia and Applications	4			4
BCA-305 / BCA-305 A / BCA-305 B / BCA-305 C / BCA-305 D	Optimization Techniques / Elements of Statistics / Combinatorial Optimization / Multi-objective Optimization / Biostatistics	4			4
BCA-351	Operating Systems Lab			2	2
BCA-352	HTML Programming Lab			2	2
BCA-353	Seminar Based on Learning			2	2
	Total Credits (5 Theory + 2 Lab)	**20**		**6**	**26**

IV Semester

Subject Code	Subject	L	T	P	Cr.
BCA-401	Data Structures	4			4
BCA-402	Java Programming	4			4
BCA-403	Computer System Architecture	4			4
BCA-404 BCA-404 A/ BCA-404 B/ BCA-404 C/ BCA-404 D	Knowledge Management / Knowledge Transfer / Knowledge Mapping/ Knowledge Management Systems/ Information Systems for KM	4			4
BCA-451	Data Structures Lab			2	2
BCA-452	Java Programming Lab			2	2
BCA-453	Computer System Architecture Lab			2	2
BCA-454	Seminar Based on Learning			2	2
	Total Credits (4 Theory + 3 Lab)	**16**		**8**	**24**

Shobhit University, Gangoh (Saharanpur)
Teaching Scheme
Effective from 2021

BCA
V Semester

Subject Code	Subject	L	T	P	Cr.
BCA-501	Software Engineering	4			4
BCA-502	Analysis of Algorithms & Data Structures	4			4
BCA-503	Mobile Computing	4			4
BCA-504	Big Data and Machine Learning	4			4
BCA-551	Software Engineering Lab			2	2
BCA-552	Algorithms and Data Structures with C++ Lab			2	2
BCA-558	Research Project-I			2	2
	Total Credits (5 Theory + 2 Lab)	**16**		**6**	**22**

VI Semester

Subject Code	Subject	L	T	P	Cr.
BCA-601	Data Communication and Computer Networks	4			4
BCA-602	Artificial Intelligence	4			4
BCA-603	Cyber Security & Cyber Laws	4			4
BCA-604	Software Project management	4			4
BCA-651	Computer Networks Lab			2	2
BCA-656	Seminar and Group Discussion			2	2
BCA-658	Research Project-II			2	2
	Total Credits (4 Theory + 3 Lab)	**16**		**6**	**22**