



MAHATHICOLLEGE
for Innovative Learning

MAHATHI COLLEGE OF PHARMACY

(Approved by AICTE, New Delhi & Affiliated to JNTU, Anantapur)
Accredited by NAAC with 'A' grade

Madanapalle Road Railway Station,
C.T.M. Cross Roads, MADANAPALLE Mandal,
Chittoor District, A.P., India. Pin: 517319

Ph.: 08571-288666, 288777
Fax: 08571-288889

1.2.1 Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Mahathi College of Pharmacy has implemented the Choice Based Credit System (CBCS) for its B.Pharm and M.Pharm programs, aligning with the guidelines prescribed by the Pharmacy Council of India (PCI). The CBCS framework enhances academic flexibility and provides students with the opportunity to select courses based on their individual interests and career goals while maintaining a structured approach to their education.

The CBCS system organizes courses into core, elective, and skill-based categories, allowing students to explore interdisciplinary areas while mastering their primary field of study. Each course is assigned specific credits, which correspond to the time required for theoretical instruction, practical work, or tutorials. For example, one credit is equivalent to one hour of lecture or two hours of practical sessions per week. This credit-based structure ensures that students receive a balanced education covering theoretical knowledge, practical skills, and research exposure.

The curriculum incorporates foundational courses, professional electives, mandatory audit courses, and research-oriented projects. For B.Pharm students, the CBCS structure supports flexibility and adaptability in learning through diverse electives and add-on programs. For M.Pharm students, the CBCS integrates specialized coursework, advanced research, and dissertation work, allowing for in-depth exploration of their chosen field.

By adhering to CBCS, Mahathi College of Pharmacy promotes academic rigor, interdisciplinary learning, and the holistic development of its students. This approach also facilitates smooth credit transfers, enabling students to pursue opportunities through Massive Open Online Courses (MOOCs) and other platforms recognized under the CBCS framework.


PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR
(Established by Govt. of A.P., Act. No. 30 of 2008)
ANANTHAPURAMU-515 002 (A.P) INDIA

**Academic Regulations (R19) for
B.Pharm (Regular-Full time)**
(Effective for the students admitted into 1 year from the Academic Year 2019-2020 onwards)

Pharmacy Council of India New Delhi

Rules & Syllabus for the Bachelor of Pharmacy (B. Pharm) Course

[Framed under Regulation 6, 7 & 8 of the Bachelor of
Pharmacy (B. Pharm) course regulations 2014]

peny
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P-517 319

1. *[Signature]*
5. *[Signature]*

2. N. Krishnaneni 3. *[Signature]*
6. *[Signature]*

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

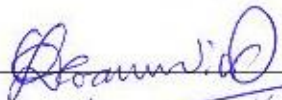
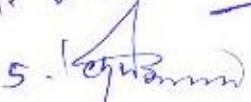
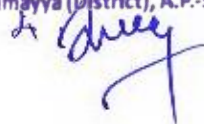
Each semester shall consist of not less than 100 working days. The odd semesters shall be conducted from the month of June/July to November/December and the even semesters shall be conducted from December/January to May/June in every calendar year.

6. Attendance and progress

A candidate is required to put in at least 80% attendance in aggregate of all 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

1. 
5. 
2. N. Krishnamoorti
6. 
3. 
4. 

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.

7.1 Credit assignment

7.1.1 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.

7.2 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 Project over 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.

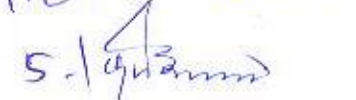
The lateral entry students shall get 52 credit points transferred from their D. Pharm program. Such students shall take up additional remedial courses of 'Communication Skills' (Theory and Practical) and 'Computer Applications in Pharmacy' (Theory and Practical) equivalent to 3 and 4 credit points respectively,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

8. Academic work

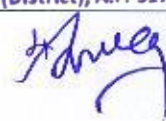
A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

8.1 Induction Program (zero semester)

Induction program for students to be offered at zero semester to bring the conducive atmosphere among the students community right at the start of the ~~first~~ first year for duration of three weeks.

1. 
5. 

2. N. Krishnareddi
6. 

3. 


- a) Physical activity – Sports, Yoga, Heartfulness relaxation and meditation
- b) Creative Arts
- c) Universal Human Values
- d) Literary
- e) Proficiency Modules
- f) Lectures by Eminent People
- g) Visits to local Areas
- h) Familiarization to Dept. & Innovations

P. S. S.
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

1. *[Signature]*
5. *[Signature]*

2. N. Krishnakumari
6. *[Signature]*

3. *[Signature]*
[Signature]

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	Communication skills – Theory *	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	Communication skills – Practical*	2	-	1
BP112RBP	Remedial Biology – Practical*	2	-	1
BP113CV	Comprehensive Viva-Voce [§] – I	-	-	-
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.

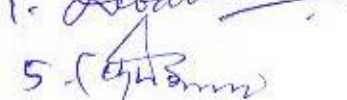
[§]Applicable ONLY for the students who have studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM)course.

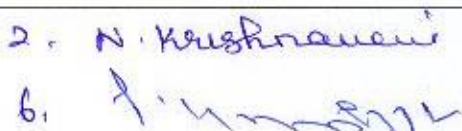
* Non University Examination (NUE)

[§]Non University Examination (NUE) with grading


PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

1. 
5. 

2. N. Krishnareni
6. 

3. 

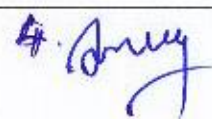
4. 

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
BP211CV	Comprehensive Viva-Voce [†] – II	-	-	-
Total		32	4	29

* Non University Examination (NUE)

[†] Non University Examination (NUE) with grading

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
BP309CV	Comprehensive Viva-Voce [†] – III	-	-	-
Total		28	4	24

[†] Non University Examination (NUE) with grading

P. S. S.
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

1. *[Signature]* 2. N. Krishnan 3. *[Signature]* 4. *[Signature]*
5. *[Signature]* 6. *[Signature]*

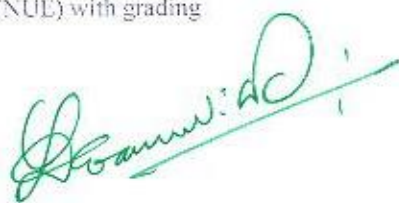
Table-IV: Course of study for semester IV

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
BP410CV	Comprehensive Viva-Voce ^e – IV	-	-	-
Total		31	5	28

^e Non University Examination (NUE) with grading

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 Pharmacy I – 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 Pharmacy I – Practical	4	-	2
BP507P	Pharmacology II – Practical	4	-	2
BP508P	Pharmacognosy and Phytochemistry II – Practical	4	-	2
BP509CV	Comprehensive Viva-Voce ^e – V	-	-	-
Total		27	5	26

^e Non University Examination (NUE) with grading



 PRINCIPAL
 PRINCIPAL
 MAHATHI COLLEGE OF PHARMACY
 St. M. Cross Roads, MADANAPALLE
 Annamaya (District), A.P.-517 329

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
BP610CV	Comprehensive Viva-Voce ^e – VI	-	-	-
Total		30	6	30

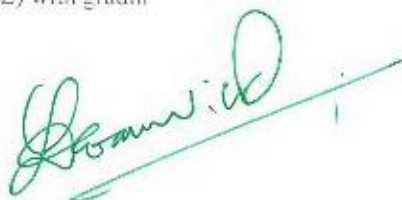
^e Non University Examination (NUE) with grading

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 PharmacyII – 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	Practice School*	12	-	6
BP707MC	Constitution of India ^e	-	-	-
BP708CV	Comprehensive Viva-Voce ^e – VII	-	-	-
Total		28	5	24

* Non University Examination (NUE)

^e Non University Examination (NUE) with grading




PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

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	3 + 3 = 6	1 + 1 = 2	4 + 4 = 8
BP804ET	Pharmaceutical Regulatory Science			
BP805ET	Pharmacovigilance			
BP806ET	Quality Control and Standardization of Herbals			
BP807ET	Computer Aided Drug Design			
BP808ET	Cell and Molecular Biology			
BP809ET	Cosmetic Science			
BP810ET	Experimental Pharmacology	12	-	6
BP811ET	Advanced Instrumentation Techniques			
BP812ET	Dietary Supplements and Nutraceuticals			
BP813PW	Project Work			
BP814MC	Essence of India Traditional Knowledge [†]	-	-	-
BP815CV	Comprehensive Viva-Voce [‡] – VIII	-	-	-
Total		24	4	22

[†] Non University Examination (NUE) with grading

Table-IX: Semester wise credits distribution

Semester	Credit Points
I	27/29 ^b /30 ^a
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 ^b /212 ^v

* 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.

^bApplicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics course.

^vApplicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology course.


PRINCIPAL
PRINCIPAL

9.1 Mandatory Courses (Non credit courses)

Mandatory courses shall be conducted at

Semester VII – Constitution of India

Semester VIII – Essence of India Traditional Knowledge

Comprehensive viva-voce should be introduced with internal evaluation.

Comprehensive viva-voce shall be conducted at the end of every semester

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 Sessional exam (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.

11.1 End semester examinations

The End Semester Examinations for each theory and practical course through semesters I to VIII shall be conducted 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.

Signature: 40

Signature
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

Tables-X: Schemes for internal assessments and end semester examinations semester wise

Semester I

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams		Total	Marks	Duration	
			Marks	Duration				
BP101T	Human Anatomy and Physiology I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP102T	Pharmaceutical Analysis I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP103T	Pharmaceutics I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP104T	Pharmaceutical Inorganic Chemistry – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP105T	Communication skills – Theory *	5	10	1 Hr	15	35	1.5 Hrs	50
BP106RBT BP106RMT	Remedial Biology/ Mathematics – Theory*	5	10	1 Hr	15	35	1.5 Hrs	50
BP107P	Human Anatomy and Physiology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP108P	Pharmaceutical Analysis I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP109P	Pharmaceutics I – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP110P	Pharmaceutical Inorganic Chemistry – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP111P	Communication skills – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP112RBP	Remedial Biology – Practical*	5	5	2 Hrs	10	15	2 Hrs	25
BP113CV	Comprehensive Viva-voce ⁵ - I	-	-	-	-	-	-	-
Total		70/75 ⁵ /80 ⁶	115/125 ⁵ /130 ⁶	23/24 ⁵ /26 ⁶ Hrs	185/200 ⁵ /210 ⁶	490/525 ⁵ /540 ⁶	31.5/33 ⁵ /35 ⁶ Hrs	675/725 ⁵ /750 ⁶

⁵ Applicable ONLY for the students studied Mathematics / Physics / Chemistry at HSC and appearing for Remedial Biology (RB) course.

⁶ Applicable ONLY for the students studied Physics / Chemistry / Botany / Zoology at HSC and appearing for Remedial Mathematics (RM) course.

* Non University Examination(NUE)

⁵ Non University Examination(NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

Principal
Principal

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P-517 379

Semester II

Course code	Name of the course	Internal Assessment			End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Duration	Total	Duration	
BP201T	Human Anatomy and Physiology II – Theory	10	15	1 Hr	25	3 Hrs	100
BP202T	Pharmaceutical Organic Chemistry I – Theory	10	15	1 Hr	25	3 Hrs	100
BP203T	Biochemistry – Theory	10	15	1 Hr	25	3 Hrs	100
BP204T	Pathophysiology – Theory	10	15	1 Hr	25	3 Hrs	100
BP205T	Computer Applications in Pharmacy – Theory*	10	15	1 Hr	25	2 Hrs	75
BP206T	Environmental sciences – Theory*	10	15	1 Hr	25	2 Hrs	75
BP207P	Human Anatomy and Physiology II – Practical	5	10	4 Hrs	15	4 Hrs	50
BP208P	Pharmaceutical Organic Chemistry I – Practical	5	10	4 Hrs	15	4 Hrs	50
BP209P	Biochemistry – Practical	5	10	4 Hrs	15	4 Hrs	50
BP210P	Computer Applications in Pharmacy – Practical*	5	5	2 Hrs	10	2 Hrs	25
BP211CV	Comprehensive Viva-Voce [†] - II	-	-	-	-	-	-
Total		80	125	20 Hrs	205	30 Hrs	725

* The subject experts at college level shall conduct examinations

[†] Non University Examination(NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

MAHATHI COLLEGE OF PHARMA:
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P-517319

Semester III

Course code	Name of the course	Internal Assessment			End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Exams Duration	Total	Marks	
BP301T	Pharmaceutical Organic Chemistry II – Theory	10	15	1 Hr	25	75	100
BP302T	Physical/Pharmaceutical – Theory	10	15	1 Hr	25	75	100
BP303T	Pharmaceutical Microbiology – Theory	10	15	1 Hr	25	75	100
BP304T	Pharmaceutical Engineering – Theory	10	15	1 Hr	25	75	100
BP305P	Pharmaceutical Organic Chemistry II – Practical	5	10	4 Hr	15	35	50
BP306P	Physical Pharmaceutics I – Practical	5	10	4 Hr	15	35	50
BP307P	Pharmaceutical Microbiology – Practical	5	10	4 Hr	15	35	50
BP308P	Pharmaceutical Engineering – Practical	5	10	4 Hr	15	35	50
BP309CV	Comprehensive Viva-Voce – III	-	-	-	-	-	-
Total		60	100	20	160	440	600

⁶ Non University Examination (NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

PRINCIPAL
PRINCIPAL
MAHATHI COLLEGE OF PHARMA:
S.T.M. Cross Roads, MADANAPATTI
Annamayya (District), A.P.-517 319

Semester IV

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams Marks	Duration	Total	Marks	Duration	
BP401T	Pharmaceutical Organic Chemistry III - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP402T	Medicinal Chemistry I - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP403T	Physical Pharmaceutics II - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP404T	Pharmacology I - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP405T	Pharmacognosy I - Theory	10	15	1 Hr	25	75	3 Hrs	100
BP406P	Medicinal Chemistry I - Practical	5	10	4 Hr	15	35	4 Hrs	50
BP407P	Physical Pharmaceutics II - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP408P	Pharmacology I - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP409P	Pharmacognosy I - Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP410CV	Comprehensive Viva-voce ⁵ - IV	-	-	-	-	-	-	-
Total		70	115	21 Hrs	185	515	31 Hrs	700

⁵ Non University Examination(NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

Handwritten signature

Handwritten signature

Handwritten signature
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

Semester V

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Marks	Duration	Total	Marks	Duration	
BP501T	Medicinal Chemistry II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP502T	Industrial Pharmacy I – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP503T	Pharmacology II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP504T	Pharmacognosy II – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP505T	Pharmaceutical Jurisprudence – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP506P	Industrial Pharmacy I – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP507P	Pharmacology II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP508P	Pharmacognosy II – Practical	5	10	4 Hr	15	35	4 Hrs	50
BP509CV	Comprehensive Viva-voce ^e - V	-	-	-	-	-	-	-
Total		65	105	17 Hr	170	480	27 Hrs	650

^e Non University Examination (NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

MAHATHI COLLEGE OF PHARMA:
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

Semester VI

Course code	Name of the course	Internal Assessment				End Semester Exams		Total Marks
		Continuous Mode	Sessional Exams Marks	Duration	Total	Marks	Duration	
BP601T	Medicinal Chemistry III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP602T	Pharmacology III – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP603T	Herbal Drug Technology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP604T	Biopharmaceutics and Pharmacokinetics – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP605T	Pharmaceutical Biotechnology – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP606T	Quality Assurance – Theory	10	15	1 Hr	25	75	3 Hrs	100
BP607P	Medicinal chemistry III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP608P	Pharmacology III – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP609P	Herbal Drug Technology – Practical	5	10	4 Hrs	15	35	4 Hrs	50
BP610CV	Comprehensive Viva-voce ⁶ - VI	-	-	-	-	-	-	-
Total		75	120	18 Hrs	195	555	30 Hrs	750

⁶ Non University Examination(NUE) and shall be graded as satisfactory (50% and above) / unsatisfactory (less than 50%)

Princip

P. V. S. S. S. S. S.

Princip
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLI
Annamayya (District), A.P.-517 319



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

Academic Regulations of M.Pharmacy (Full Time) Programme

(Effective for the students admitted into I year from the Academic Year 2021-22 and onwards)

Jawaharlal Nehru Technological University Anantapur (JNTUA) offers **Two Years (Four Semesters)** full-time Master of Pharmacy (M.Pharm.) Post Graduate Degree programme, at its constituent (non- autonomous) unit.

The Jawaharlal Nehru Technological University Anantapur shall confer M.Pharm. degree on candidates who are admitted to the programme and fulfill all the requirements for the award of the degree.

1. Award of the M.Pharm. Degree

A student will be declared eligible for the award of the M.Pharm. degree if he/she fulfils the following:

- 1.1 Pursues a course of study for not less than two academic years and not more than four academic years.
- 1.2 Registers for 95 credits and secures all 95 credits.

2. Students, who fail to fulfil all the academic requirements for the award of the degree within four academic years from the year of their admission, shall forfeit their seat in M.Sc. course and their admission stands cancelled.

3. Programme of Study:

The following M.Pharm. specializations are offered at its constituent (non-autonomous) unit & affiliated (nonautonomous) colleges:

S.No.	Discipline	Name of the Specialization	Code
1	Master of Pharmacy	Pharmacology	
2		Pharmaceutical Chemistry	
3		Pharmaceutics	
4		Pharmaceutical Analysis and Quality Assurance	
5		Pharmacognosy	
6		Industrial Pharmacy	
7		Pharmaceutical Technology	
8		Pharmaceutical Analysis	
9		Pharmacy Practice	
10		Pharmaceutics-Drug Regulatory Affairs	
11		Pharmaceutical Quality Assurance	

and any other specializations as approved by AICTE/PCI/University from time to time.


PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

4. Eligibility for Admissions:

- 4.1 Admission to the M.Sc. programme shall be made subject to the eligibility, qualifications and specialization prescribed by the A.P. State Government/University for each programme, from time to time.
- 4.2 Admissions shall be made on the basis of either the merit rank or Percentile obtained by the qualified student in the relevant qualifying GPAT Examination / the merit rank obtained by the qualified student in an entrance test conducted by A.P. State Government (APPGECET) for M.Pharm. programmes/an entrance test conducted by university/ on the basis of any other exams approved by the University, subject to reservations as laid down by the Govt. from time to time.

5. Programme related terms:

- 5.1 **Credit:** A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (Lecture/Tutorial) or two hours of practical work/field work per week.

Credit definition:

1 Hr. Lecture (L) per week	1 credit
1 Hr. Tutorial (T) per week	1 credit
1 Hr. Practical (P) per week	0.5 credit

- 5.2 **Academic Year:** Two consecutive (one odd + one even) semesters constitute one academic year.
- 5.3 **Choice Based Credit System (CBCS):** The CBCS provides choice for students to select from the prescribed courses.

6. Programme Pattern:

- 6.1 Total duration of the of M.Pharm. programme is two academic years
- 6.2 Each academic year of study is divided into two semesters.
- 6.3 Each Semester shall be of 22 weeks duration (inclusive of Examinations), with a minimum of 90 instructional days per semester.
- 6.4 The student shall not take more than four academic years to fulfill all the academic requirements for the award of M.Pharm. degree from the date of commencement of first year first semester, failing which the student shall forfeit the seat in M.Pharm. programme.
- 6.5 The medium of instruction of the programme (including examinations and project reports) will be in English only.
- 6.6 All subjects/courses offered for the M.Pharm. programme are broadly classified as follows:

S.No.	Broad Course Classification	Course Category	Description
1.	Core Courses	Foundational & Professional Core Courses (PC)	Includes subjects related to the parent discipline


PRINCIPAL
MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319



2.	Elective Courses	Electives	Includes elective subjects related to the parent discipline/inter-disciplinary subjects or subjects in an area outside the parent discipline which are of importance in the context of special skill development
3.	Research	Research methodology & IPR	To understand importance and process of creation of patents through research
		Seminar	Ensures preparedness of students to undertake major projects/Dissertation, based on core contents related to specialization
		Cocurricular Activities/Journal Club	Attending conferences, scientific presentations and other scholarly activities
		Dissertation	Major Project
4.	Audit Courses	Mandatory noncredit courses	Covering subjects of developing desired attitude among the learners is on the line of initiatives such as Unnat Bharat Abhiyan, Yoga, Value education etc.

- 6.7 The college shall take measures to implement Virtual Labs (<https://www.vlab.co.in>) which provide remote access to labs in various disciplines of Science and will help student in learning basic and advanced concept through remote experimentation. Student shall be made to work on virtual lab experiments during the regular labs.
- 6.8 A faculty advisor/mentor shall be assigned to each specialization to advise students on the programme, its Course Structure and Curriculum, Choice of Courses, based on his competence, progress, pre-requisites and interest.
- 6.9 Preferably 25% course work for the theory courses in every semester shall be conducted in the blended mode of learning.

7. Attendance Requirements:

- 7.1 A student shall be eligible to appear for the University external examinations if he/she acquires i) a minimum of 50% attendance in each course and ii) 75% of attendance in aggregate of all the courses.
- 7.2 Condonation of shortage of attendance in aggregate up to 10% (65% and above and below 75%) in each semester may be granted by the College Academic Committee.
- 7.3 Condonation of shortage of attendance shall be granted only on genuine and valid reasons on representation by the candidate with supporting evidence
- 7.4 Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examination of that class.
- 7.5 A stipulated fee shall be payable towards condonation of shortage of attendance.
- 7.6 A student will not be promoted to the next semester unless he satisfies the attendance requirements of the present semester. They may seek re-admission into that semester when offered next.

Pam
PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

- 7.7 If any candidate fulfils the attendance requirement in the present semester, he shall not be eligible for readmission into the same class.
- 7.8 If the learning is carried out in blended mode (both offline & online), then the total attendance of the student shall be calculated considering the offline and online attendance of the student.

8. Evaluation – Distribution and Weightage of Marks:

The performance of a student in each semester shall be evaluated subject - wise (irrespective of credits assigned), for a maximum of 100 marks for theory and 100 marks for practical, based on Internal Evaluation and End Semester Examination.

- 8.1 There shall be five units in each of the theory subjects. For the theory subjects 60 marks will be for the End Examination and 40 marks will be for Internal Evaluation.
- 8.2 Two Internal Examinations shall be conducted for 30 marks each, one in the middle of the Semester and the other immediately after the completion of instruction. Each midterm examination shall be conducted for a total duration of 120 minutes with 3 questions (without choice) each question for 10 marks. Final Internal marks for a total of 30 marks shall be arrived at by considering the marks secured by the student in both the internal examinations with 80% weightage to the better internal exam and 20% to the other. There shall be an online examination conducted by the college for the remaining 10 marks with 20 objective questions.
- 8.3 The following pattern shall be followed in the End Examination:
 - i. Five questions shall be set from each of the five units with either/or type for 12 marks each.
 - ii. All the questions have to be answered compulsorily.
 - iii. Each question may consist of one, two or more bits.
- 8.4 For practical subjects, 60 marks shall be for the End Semester Examinations and 40 marks will be for internal evaluation based on the day-to-day performance.
The internal evaluation based on the day-to-day work-10 marks, record- 10 marks and the remaining 20 marks to be awarded by conducting an internal laboratory test. The end examination shall be conducted by the examiners, with a breakup mark of Procedure-10, Experimentation-25, Results-10, Viva-voce-15.
- 8.5 There shall be a **Seminars** for internal evaluation of 100 marks. A student under the supervision of a faculty member, shall collect the literature on a topic and critically review the literature and submit it to the department in a report form and shall make an oral presentation before the Project Review Committee consisting of Head of the Department, supervisor/mentor and two other faculty members of the department. The student has to secure a minimum of 50% of marks, to be declared successful. If he fails to obtain the minimum marks, he has to reappear for the same as and when supplementary



examinations are conducted. The seminar shall be conducted anytime during the semester as per the convenience of the Project Review Committee and students. There shall be no external examination for Technical Seminar.

- 8.6 There shall be Mandatory **Audit courses** for zero credits. There is no external examination for audit courses. However, attendance shall be considered while calculating aggregate attendance and student shall be declared to have passed the mandatory course only when he/she secures 50% or more in the internal examinations. In case, the student fails, a re-examination shall be conducted for failed candidates for 40 marks every six months/semester satisfying the conditions mentioned in item 1 & 2 of the regulations.
- 8.7 There shall be **Comprehensive Viva-Voce** in III semester. This will test the student's learning and understanding during the course of their specialization. The Comprehensive viva-voce will be conducted by the committee consisting of Head of the Department and two faculty members related to the specialization. The Comprehensive Viva-Voce shall be evaluated for 100 marks by the committee. There are no internal marks for the Comprehensive Viva-Voce. A student shall acquire 2 credits assigned to the Comprehensive Viva-voce when he/she secures 50% or more marks for the total of 100 marks. In case, if a student fails in Comprehensive Viva-voce he/she shall reappear as and when IV semester supplementary examinations are conducted.
- 8.8 A candidate shall be deemed to have secured the minimum academic requirement in a subject if he secures a minimum of 40% of marks in the End Examination and a minimum aggregate of 50% of the total marks in the End Semester Examination and Internal Evaluation taken together.
- 8.9 In case the candidate does not secure the minimum academic requirement in any of the subjects he/she has to reappear for the Semester Examination either supplementary or regular in that subject or repeat the course when next offered or do any other specified subject as may be required.
- 8.10 The laboratory records and mid semester test papers shall be preserved for a minimum of 3 years in the respective institutions as per the University norms and shall be produced to the Committees of the University as and when the same are asked for.

9. Credit Transfer Policy

- a) As per University Grants Commission (Credit Framework for Online Learning Courses through SWAYAM) Regulation, 2016, the University shall allow up to a maximum of 40% of the total courses being offered in a particular Programme in a semester through the Online Learning courses through SWAYAM.
- 9.1 The University shall offer credit mobility for MOOCs and give the equivalent credit weightage to the students for the credits earned through online learning courses through SWAYAM platform.


PRINCIPAL
PRINCIPAL

MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

- 9.2 The online learning courses available on the SWAYAM platform will be considered for credit transfer. SWAYAM course credits are as specified in the platform
- 9.3 Student registration for the MOOCs shall be only through the institution, it is mandatory for the student to share necessary information with the institution
- 9.4 The institution shall select the courses to be permitted for credit transfer through SWAYAM. However, while selecting courses in the online platform institution would essentially avoid the courses offered through the curriculum in the offline mode.
- 9.5 The institution shall notify at the beginning of semester the list of the online learning courses eligible for credit transfer in the forthcoming Semester.
- 9.6 The institution shall also ensure that the student has to complete the course and produce the course completion certificate as per the academic schedule given for the regular courses in that semester
- 9.7 The institution shall designate a faculty member as a Mentor for each course to guide the students from registration till completion of the credit course.
- 9.8 The university shall ensure no overlap of SWAYAM MOOC exams with that of the university examination schedule. In case of delay in SWAYAM results, the university will re-issue the marks sheet for such students.
- 9.9 Student pursuing courses under MOOCs shall acquire the required credits only after successful completion of the course and submitting a certificate issued by the competent authority along with the percentage of marks and grades.
- 9.10 The institution shall submit the following to the examination section of the university:
- List of students who have passed MOOC courses in the current semester along with the certificates of completion.
 - Undertaking form filled by the students for credit transfer.
- 9.11 The university shall resolve any issues that may arise in the implementation of this policy from time to time and shall review its credit transfer policy in the light of periodic changes brought by UGC, SWAYAM, NPTEL and state govt.
- b) Students shall also be permitted to take online courses through other MOOC platforms like Coursera, edX etc. as per the guidelines specified in a). Only the courses with evaluation specified in percentage/grades shall be considered. If not specified in the online platform, then following credit equivalence shall be considered:
- Courses of 8 weeks duration: 2 Credits
 Courses of 10 weeks duration: 3 Credits
 Courses of 12 weeks duration: 4 Credits

10. Re-registration for Improvement of Internal Evaluation Marks:

A candidate shall be given one chance to re-register for each subject provided the internal marks secured by a candidate are less than 50% and has failed in the end examination


 PRINCIPAL
 PRINCIPAL
 MAHATHI COLLEGE OF PHARMACY
 C.T.M. Cross Roads, MADANAPALLE
 Annamayya (District), A.P.-517 329



- 10.1 The candidate should have completed the course work and obtained examinations results for **I, II and III** semesters.
- 10.2 The candidate should have passed all the subjects for which the Internal Evaluation marks secured are more than 50%.
- 10.3 Out of the subjects the candidate has failed in the examination due to Internal Evaluation marks secured being less than 50%, the candidate shall be given one chance for each Theory subject and for a maximum of **three** Theory subjects for Improvement of Internal evaluation marks.
- 10.4 The candidate has to re-register for the chosen subjects and fulfill the academic requirements.
- 10.5 For reregistration the candidates have to apply to the University through the college by paying the requisite fees and get approval from the University before the start of the semester in which re-registration is required
- 10.6 In the event of availing the Improvement of Internal evaluation marks, the internal evaluation marks as well as the End Examinations marks secured in the previous attempt(s) for the reregistered subjects stand cancelled.

11. Evaluation of Project/Dissertation Work:

The Project work shall be initiated at the beginning of the III Semester and the duration of the Project is of two semesters. Evaluation of Project work is for 300 marks with 200 marks for internal evaluation and 100 marks for external evaluation. Internal evaluation of the Project Work – I & Project work – II in III & IV semesters respectively shall be for 100 marks each. External evaluation of final Project work viva voce in IV semester shall be for 100 marks.

A Project Review Committee (PRC) shall be constituted with the Head of the Department as Chairperson, Project Supervisor and one faculty member of the department offering the M.Pharm. programme.

- 11.1 A candidate is permitted to register for the Project Work in III Semester after satisfying the attendance requirement in all the subjects, both theory and laboratory (in I & II semesters).
- 11.2 A candidate is permitted to submit Project dissertation with the approval of PRC. The candidate has to pass all the theory, practical and other courses before submission of the Thesis.
- 11.4 Project work shall be carried out under the supervision of teacher in the parent department concerned.
- 11.5 A candidate shall be permitted to work on the project in an industry/research organization on the recommendation of the Head of the Department. In such cases, one of the teachers from the department concerned would be the internal guide and an expert from the industry/ research organization concerned shall act as co-supervisor/ external guide. It is mandatory for the candidate to make full disclosure of all data/results on which they wish to base their dissertation. They cannot claim confidentiality simply because it would come into conflict

with the Industry's or R&D laboratory's own interests. A certificate from the external supervisor is to be included in the dissertation.

- 11.6 Continuous assessment of Project Work - I and Project Work – II in III & IV semesters respectively will be monitored by the PRC.
- 11.7 The candidate shall submit status report by giving seminars in three different phases (two in III semester and one in IV semester) during the project work period. These seminar reports must be approved by the PRC before submission of the Project Thesis.
- 11.8 After registration, a candidate must present in Project Work Review - I, in consultation with his Project Supervisor, the title, objective and plan of action of his Project work to the PRC for approval within four weeks from the commencement of III Semester. Only after obtaining the approval of the PRC can the student initiate the project work.
- 11.9 The Project Work Review - II in III semester carries internal marks of 100. Evaluation should be done by the PRC for 50 marks and the Supervisor will evaluate the work for the other 50 marks. The Supervisor and PRC will examine the Problem Definition, Objectives, Scope of Work, Literature Survey in the same domain and progress of the Project Work.
- 11.10 A candidate has to secure a minimum of 50% of marks to be declared successful in Project Work Review - II. Only after successful completion of Project Work Review – II, candidate shall be permitted for Project Work Review – III in IV Semester. The unsuccessful students in Project Work Review - II shall reappear for it as and when supplementary examinations are conducted.
- 11.11 The Project Work Review - III in IV semester carries 100 internal marks. Evaluation should be done by the PRC for 50 marks and the Supervisor will evaluate it for the other 50 marks. The PRC will examine the overall progress of the Project Work and decide whether or not eligible for final submission. A candidate has to secure a minimum of 50% of marks to be declared successful in Project Work Review - III. If he fails to obtain the required minimum marks, he has to reappear for Project Work Review - III after a month.
- 11.12 For the approval of PRC the candidate shall submit the draft copy of dissertation to the Head of the Department and make an oral presentation before the PRC.
- 11.13 After approval from the PRC, the students are required to submit a report showing that the plagiarism is within 30%. The dissertation report will be accepted only when the plagiarism is within 30%, which shall be submitted along with the dissertation report.
- 11.14 Research paper related to the Project Work shall be published in conference proceedings/UGC recognized journal. A copy of the published research paper shall be attached to the dissertation.
- 11.15 After successful plagiarism check and publication of research paper, three copies of the dissertation certified by the supervisor and HOD shall be submitted to the College.



- 11.16 The dissertation shall be adjudicated by an external examiner selected by the University. For this, the Principal of the College shall submit a panel of three examiners as submitted by the supervisor concerned and department head for each student. However, the dissertation will be adjudicated by one examiner nominated by the University.
- 11.17 If the report of the examiner is not satisfactory, the candidate shall revise and resubmit the dissertation, in the time frame as decided by the PRC. If report of the examiner is unfavorable again, the thesis shall be summarily rejected. The candidate has to reregister for the project and complete the project within the stipulated time after taking the approval from the University
- 11.18 If the report of the examiner is satisfactory, the Head of the Department shall coordinate and make arrangements for the conduct of Project Viva voce exam.
- 11.19 The Project Viva voce examinations shall be conducted by a board consisting of the Supervisor, Head of the Department and the external examiner who has adjudicated the dissertation. For Dissertation Evaluation (Viva voce) in IV Sem. there are external marks of 100 and it is evaluated by external examiner. The candidate has to secure a minimum of 50% marks in Viva voce exam.
- 11.20 If he fails to fulfill the requirements as specified, he will reappear for the Project Viva voce examination only after three months. In the reappeared examination also, if he fails to fulfill the requirements, he will not be eligible for the award of the degree.

12. Credits for Journal Club / Co-curricular Activities

The credits assigned for co-curricular activities shall be given by the principals of the colleges and the same shall be submitted to the University.

A Student shall earn 02 credits under the head of co-curricular activities, viz., attending Conference, Scientific Presentations and Other Scholarly Activities.

Following are the guidelines for awarding Credits for Co-curricular Activities

Name of the Activity	Maximum Credits / Activity
Participation in National Level Seminar/ Conference / Workshop /Training programs (related to the specialization of the student)	1
Participation in International Level Seminar / Conference / workshop/Training programs held outside India (related to the specialization of the student)	2
Academic Award/Research Award from State Level/National Agencies	1
Academic Award/Research Award from International Agencies	2
Research / Review Publication in National Journals (Indexed in Scopus / Web of Science)	1
Research / Review Publication in International Journals with Editorial board outside India (Indexed in Scopus / Web of Science)	2


PRINCIPAL
PRINCIPAL
MAHATHI COLLEGE OF PHARMACY
C.T.M. Cross Roads, MADANAPALLE
Annamayya (District), A.P.-517 319

Note:

- i) Credit shall be awarded only for the first author. Certificate of attendance and participation in a Conference/Seminar is to be submitted for awarding credit.
- ii) Certificate of attendance and participation in workshops and training programs (Internal or External) is to be submitted for awarding credit. The total duration should be at least one week.
- iii) Participation in any activity shall be permitted only once for acquiring required credits under cocurricular activities

13. Grading:

As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades and corresponding percentage of marks shall be followed:

After each course is evaluated for 100 marks, the marks obtained in each course will be converted to a corresponding letter grade as given below, depending on the range in which the marks obtained by the student fall.

Structure of Grading of Academic Performance

Range in which the marks in the subject fall	Grade	Grade points Assigned
≥ 90	S (Superior)	10
$\geq 80 < 90$	A (Excellent)	9
$\geq 70 < 80$	B (Very Good)	8
$\geq 60 < 70$	C (Good)	7
$\geq 50 < 60$	D (Pass)	6
< 50	F (Fail)	0
Absent	Ab (Absent)	0

- i) A student obtaining Grade 'F' or Grade 'Ab' in a subject shall be considered failed and will be required to reappear for that subject when it is offered the next supplementary examination.
- ii) For noncredit audit courses, "Satisfactory" or "Unsatisfactory" shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA/Percentage.

Computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

The Semester Grade Point Average (SGPA) is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e.,

$$SGPA = \Sigma (C_i \times G_i) / \Sigma C_i$$

where, C_i is the number of credits of the i^{th} subject and G_i is the grade point scored by the student in the i^{th} course.

- i) The Cumulative Grade Point Average (CGPA) will be computed in the same manner considering all the courses undergone by a student over all the semesters of a program, i.e.,



$$CGPA = \Sigma (C_i \times S_i) / \Sigma C_i$$

where “S_i” is the SGPA of the ith semester and C_i is the total number of credits up to that semester.

- ii) Both SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.
- iii) While computing the SGPA the subjects in which the student is awarded Zero grade points will also be included.

Grade Point: It is a numerical weight allotted to each letter grade on a 10-point scale.

Letter Grade: It is an index of the performance of students in a said course. Grades are denoted by letters S, A, B, C, D and F.

14. Award of Class:

After a student has satisfied the requirements prescribed for the completion of the program and is eligible for the award of M. Tech. Degree, he shall be placed in one of the following four classes:

Class Awarded	Percentage of Marks to be secured
First Class with Distinction	$\geq 70\%$
First Class	$< 70\% \geq 60\%$
Pass Class	$< 60\% \geq 50\%$

15. **Exit Policy:** The student shall be permitted to exit with a PG Diploma based on his/her request to the university through the respective institution at the end of first year subject to passing all the courses in first year.

The University shall resolve any issues that may arise in the implementation of this policy from time to time and shall review the policy in the light of periodic changes brought by UGC, AICTE and State government.

16. Withholding of Results:

If the candidate has any case of in-discipline pending against him, the result of the candidate shall be withheld, and he will not be allowed/promoted into the next higher semester. The issue of degree is liable to be withheld in such cases.

17. Transitory Regulations

Discontinued, detained, or failed candidates are eligible for readmission as and when the semester is offered after fulfilment of academic regulations. Candidates who have been detained for want of attendance or not fulfilled academic requirements or who have failed after having undergone the course in earlier regulations or have discontinued and wish to continue the course are eligible for admission into the unfinished semester from the date of commencement of class work with the same or