FOR

Under Graduate Programmes

(wef. 2023-24)

(NEP Version: 01)

(National Education Policy[NEP] Compliant)



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR

(AN AUTONOMOUS INSTITUTION AFFILIATED TO RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAAC ACCREDITED WITH 'A' GRADE)

> Phone No. 0712-2667777, 0712-2667666 Website: www.sbjit.edu.in Email: info@sbjit.edu.in

Prepared By:

DD BAN IN B Thries S. H. DAN I ASKIRB ISS TECHNOLOGY Dr. Sanjay L Badjate

S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

Managr

(NEP VERSION: 01)

INDEX

Sr. No.	Regulation No.	Contents	Page No.
1		Preamble	3
2		Short Title and Commencement	4
3		Abbreviations and Definitions	4
4		National Education Policy [NEP] Framework	6
5		Academic Programmes	
	N-5.1	UG Programme- Qualification Title, Multiple Exits, Re-entry or Lateral Entry, Various options	7
	N-5.2	Semester System	13
	N-5.3	Outcome Based Education	13
6		Academic Courses	14
	N-6.1	Curriculum Structure	14
	N-6.2	Course Codes	15
	N-6.3	Course Credits	17
	N-6.4	Courses of Special Nature	18
	N-6.5	Starting a new Course	20
7		Admission, Enrollment, Registration & ABC	20
	N-7.1	Admission	_ 20
	N-7.2	Enrollment	21
	N-7.3	Registration	21
	N-7.4	Change of Branch	23
	N-7.5	Equivalence and Absorption of students	23
	N-7.6	Withdrawal	24
	N-7.7	Academic Bank of Credits	24



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

a

(NEP VERSION: 01)

CONTENTS

Ī	8		Assessment & Evaluation	25
		N-8.1	Examination Scheme	25
		N-8.2	Question Paper Pattern	25
		N-8.3	Theory Course	26
		N-8.4	Practical Course	29
		N-8.5	Mandatory Audit Course	31
	PAN	N-8.6	Internship/ On Job Training	31
		N-8.7	Project Course	32
		; N-8.8	Liberal Learning Courses/ IKS/ AEC of IV Semester B.Tech./ VEC/ Comm. Engg. Project/ Field Project	32
Ü		N-8.9	Incentive Scheme	33
		N-8.10	Paper Showing and Grievance Handling	38
		N-8.11	Revaluation	38
		N-8.12	Forego	39
	9		Attendance, Absence, Leave Rules and Dismissals	40
ğ	10		Grading	42
		N-10.1	The Grading System	42
		N-10.2	Guidelines for Award of Grades	44
		N-10.3	Standard Relative Grading System	45
		N-10.4	Award of Grade Based on Absolute Marks System	47
		N-10.5	Improvement of Grade/CGPA while undertaking a Programme	48
		N-10.6	Grade Moderation Committee	49
		N-10.7	Calculation of SGPA and CGPA	- 50
		N-10.8	Grade Card	51
		N-10.9	Indication of Attempt on Grade Card '	52
		N-10.10	Minimum Requirements for the Award of the Degree	52
		N-10.11	Award of Degree	53
		N-10.12	Award of Medals / Scholarships	53
	11		Code of Conduct and Discipline	53
	12		Act of Malpractices/ Unfair means	55
	13		Emergent Cases	56
	14		Interpretation of Regulations	57
	15		Power to Modify	57
	16		Annexure-I, Curriculum scheme for 1st Year B.Tech., III-VIII Semester B.Tech CD, CM, CS, EE, ET & ME.	58



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.



Je

(NEP VERSION: 01)

1. PREAMBLE

- S. B. Jain Institute of Technology Management and Research, Nagpur, established in 2008 by Sir Shantilal Badjate Charitable Trust, is a self-financed, Hindi linguistic minority Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur; approved by All India Council for Technical Education, New Delhi and Directorate of Technical Education, Maharashtra State. It is accredited with NAAC "A" Grade.
- The Institute offers six undergraduate, two postgraduate and one Ph.D. programme. The undergraduate programmes are B.Tech. in Computer Science and Engineering, Computer Science and Engineering(Artificial Intelligence and Machine Learning), Computer Science and Engineering(Data Science), Electrical Engineering, Electronics and Telecommunication Engineering and Mechanical Engineering. The Postgraduate Programmes are M.Tech in Electronics Engineering and MBA. It offers Ph.D. programme in Electronics and Tele-Communication Engineering.
- Since its inception, the Institute has continuously seen a rise in popularity amongst the aspiring students and their parents. It has become a preferred destination of the students due to quality technical education, matching infrastructure, robust teaching-learning practices as well as holistic growth and good employability.
- The Institute has a very responsive academic system involving best planning, monitoring and control at all levels. Outcome Based Education (OBE) is adopted by the Institute with focus on attainment of blooms taxonomy levels.
- The Institute has an active Internal Quality Assurance Cell (IQAC) which imbibes quality culture and strives for continuous improvement in all the Institutional endeavors.
- It promotes all-round development of the students by providing various opportunities in academics, technical, cultural, social and sports. There are student forum in every department that enhances their managerial and leadership skills.
- The Institute is associated with professional bodies viz. IEEE, IETE, ISTE, SAE & ISHRAE through active Professional Memberships / Chapters which organizes various activities/events for professional development.
- The Institute has adopted National Education Policy [NEP-2020] for all its B.Tech. Programmes which shall be effective from the batch admitted in the First Year in academic year 2023-24 and onwards.
- > The Institute's Vision and Mission Statements are:

Vision

Emerge as a leading Institute for developing competent and creative Professionals.

Mission

- Providing Quality Infrastructure and experienced faculty for academic excellence.
- Inculcating skills, knowledge and opportunities for competency and creativity.
- Aligning with Industries for knowledge sharing, research and development.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

Je.

(NEP VERSION: 01)

2. SHORT TITLE & COMMENCEMENT

- N.2.1 The regulations listed under this head are for all UG programmes under NEP which shall be effective from the batch admitted in the First Year in academic year 2023-24 and onwards and they are called as "Academic Rules and Regulations 2023-24 (NEP Version:01)".
- N.2.2 The regulations are subject to amendments made by the Academic Council with the approval of the Governing Body of the Institute from time to time with consideration of recommendations by the Board of Studies as may be applicable.

3. ABBREVIATIONS AND DEFINITIONS

"Government" shall mean the Government of Maharashtra/Government of (i) India as may be applicable. "DTE" shall mean Directorate of Technical Education, Government of (ii) Maharashtra. "University" shall mean Rashtrasant Tukadoji Maharaj Nagpur University, (iii) "Regulating Authority" shall mean any regulatory or controlling body for (iv) the Technical Education in India. "UGC" shall mean University Grants Commission, Government of India, (v) New Delhi. "AICTE" shall mean the All India Council for Technical Education, New (vi) "NEP" shall mean the National Education Policy 2020. (vii) "NCrF" shall mean the National Credit Framework. (viii) "Institute" shall mean S. B. Jain Institute of Technology, Management & (ix) Research, Nagpur "Governing Body" shall mean the Governing Body of the Institute (x) constituted as per the guidelines of UGC for autonomous colleges. "Academic Council" shall mean the Academic Council of the Institute (xi) constituted as per the guidelines of UGC for autonomous colleges. "BOS" shall mean the Board of Studies of the department, constituted as per (xii) the Guidelines of UGC for autonomous colleges. "Finance Committee" shall mean the Finance committee of the Institute (xiii) constituted as per the guidelines of UGC for autonomous colleges. "Principal" shall mean the Principal of the Institute. (xiv) "COE" shall mean the Controller of Examinations of the Institute. (xv) "Vice-Chancellor" shall mean the Vice-Chancellor of the University. (xvi) "Degree" shall mean the Bachelor of Technology (B.Tech.) or Master of (xvii) Technology (M.Tech.) or Master of Business Administration (MBA), and other degrees of the Institute as may be approved by the Regulating Authority. "Applicant" shall mean an individual who applies for admission to any UG (xviii) programme of the Institute.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.



4

(NEP VERSION: 01)

(xix)	"Student" shall mean a student registered for UG programme for studies leading to any degree offered by the Institute and sought final admission to the degree programme.
(xx)	"Direct Admission Student" shall mean a student who is admitted directly to second year of the B.Tech. degree programme after completion of the appropriate Diploma / B.Sc. Course and registered for undergraduate programme of the Institute for fulltime study leading to the respective B.Tech. degree.
(xxi)	"Course" shall mean a curricular component identified by a designated number and title.
(xxii)	"Programme" Programme shall mean the stream in which the degree is awarded.
(xxiii)	"Scheme of Teaching and Examination" shall mean the scheme of teaching and examination for a programme of study as approved by the Academic Council.
(xxiv)	"Course Coordinator" shall mean a faculty member who shall have full responsibility for the course, coordinating the work of other faculty member(s) involved in that course, including examinations and the award of grades.
(xxv)	"Grade Moderation Committee" shall mean the committee appointed by the Chairman, Academic Council to moderate grades awarded by the examiner, if required.
(xxvi)	"SGPA" shall mean the Semester Grade Point Average.
(xxvii)	"CGPA" shall mean the Cumulative Grade Point Average.
(xxviii)	"EXC" shall mean Examination committee constituted as per guidelines of competent authority.
(xxix)	"ISV" shall mean In-charge of Spot Valuation, appointed by the Principal.
(xxx)	"OIC " shall mean Officer In-charge of the End Semester Examination.
(xxxi)	"Guide" shall mean a person who is qualified to supervise a project/dissertation work of students and is approved by the Academic Council.
(xxxii)	"GRC" shall mean Grievance Redressal Committee of the Institute.
(xxxiii)	"Competent Authority" shall mean the Governing Body/Academic Council of the Institute/ University/Government/UGC/Regulating Authority as the case may be.
(xxxiv)	"Equivalence Committee" shall mean the Equivalence Committee appointed by the Academic Council.
(xxxv)	"NSQF" mean National Skill Qualifications Framework



(xxxvi)

S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

"NHEQF" mean National Higher Education Qualifications Framework



(NEP VERSION: 01)

4. NATIONAL EDUCATION POLICY[NEP] FRAMEWORK

The NEP 2020 Four Year Multidisciplinary Engineering Curriculum Framework offers:

- > The opportunity for learners to choose the courses of their interest in all disciplines.
- The multiple entry and exit options with the award of UG certificate/ UG diploma/ or three-year degree depending upon the number of credits secured.
- The flexibility for learners to move from one institution to another to enable them to have multi and/or interdisciplinary learning.
- One Semester Internship/ On Job Training (OJT).
- Provision of Vocational and Skill Enhancement Courses (VSEC), Indian Knowledge System (IKS), Community Engagement Project (CEP)/Field Project (FP) in Major Discipline Degree.
- > Horizontal and Vertical mobility with multiple entry and exit options at each Level.
- Provision of NSQF compliant Skill-based Courses and internships for Exits at different Levels.
- Credits for Co-curricular and Extra-Curricular Activities as Curricular activities besides provision of credits for the Ability Enhancement Courses (AEC) and Value Education Courses (VEC).
- Interdisciplinary or Multidisciplinary education through Single and Double Minors and Open Electives (OE).
- The flexibility to switch to alternative modes of learning (offline, Online learning, and hybrid modes of learning).



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

le

(NEP VERSION: 01)

5. ACADEMIC PROGRAMMES

The Institute offers six undergraduate programmes. The undergraduate programmes are Computer Science and Engineering, Computer Science and Engineering(Artificial Intelligence and Machine Learning), Computer Science and Engineering(Data Science), Electrical Engineering, Electronics and Telecommunication Engineering and Mechanical Engineering.

Admission to all these programmes are based on the eligibility criteria laid down by the competent authority.

N.5.1 Under Graduate Programmes:

N-5,1.1 The Institute offers following Undergraduate programmes:

Table No. N-5.1.1

Sr. No.	Department	Programme Title	Programme Code
1	Computer Science and Engineering	B.Tech. in Computer Science and Engineering with Multidisciplinary Minor	cs
2	Emerging Technologies	B.Tech. in Computer Science and Engineering (Artificial Intelligence and Machine Learning) with Multidisciplinary Minor	СМ
3	Emerging Technologies	B.Tech. in Computer Science and Engineering (Data Science) with Multidisciplinary Minor	
4	Electrical Engineering	B.Tech. in Electrical Engineering with Multidisciplinary Minor	EE
5	Electronics and Telecommunication Engineering	B.Tech. in Electronics and Telecommunication Engineering with Multidisciplinary Minor	
6	Mechanical Engineering	B.Tech.in Mechanical Engineering with Multidisciplinary Minor	ME





(NEP VERSION: 01)

N-5.1.2 Qualification Title under Four-Years UG Engineering Programme with Multiple Entry and Multiple Exit options

The Four-year Bachelor's Multidisciplinary Engineering Degree Programme offered by Institute allows the students to experience the full range of holistic and multidisciplinary education in addition to a focus on the chosen major and minors as per their choices. The Qualification Title for different levels under the Four-year Bachelor's Multidisciplinary Engineering UG Programme with multiple entry and multiple exit options are as given below:

N-5.1.2 Qualification Title

Levels	Qualification Title	Semester	Year
4.5	One Year UG Certificate in Major Discipline	2	1
5.0	Two Years UG Diploma in Major Discipline	4	2
5.5	Three Years B.Voc. in Major Discipline	6	3
6.0	4-Years Bachelor's degree (B.Tech.) in Technology with Multidisciplinary Minor	8	4
6.0	4-Years Bachelor's degree (B.Tech.) in Technology- Honors and Multidisciplinary Minor	8	4
6.0	4-Years Bachelor's degree (B.Tech.) in Technology Honors with Research and Multidisciplinary Minor	8	4
6.0	4-Years Bachelor's degree (B.Tech.) in Technology -Major Engg. Discipline with Double Minors (Multidisciplinary and Specialization Minors)	8	4







ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

N-5.1.3 Multiple Exits

- Students will have the flexibility to enter a programme in odd semesters and exit a programme after the successful completion of even semesters as per their future career needs.
- Students exiting the First Year programme after securing all credits of I and II Semester shall be awarded UG Certificate in the relevant Discipline provided they secure 8 credits [details provided in Table N-5.1.3] offered during summer vacation.
- Students exiting the Second Year Programme after securing all credits of I, II, III and IV Semester shall be awarded UG Diploma in the relevant Discipline provided they secure additional 8 credits [details provided in Table N-5.1.3] offered during summer vacation after the second year.
- Students exiting the 3-year UG program will be awarded B.Voc. in the relevant Discipline upon securing all credits of I, II, III, IV, V and VI Semester provided they secure additional 8 credits [details provided in Table N-5.1.3] offered during summer vacation after the sixth semester.
- Exit options shall be provided with Certification, Diploma and B. Vocational degrees to the students at the end of the second, fourth and sixth semester, respectively, in the four-year degree programme.
- Students will receive a Bachelor's degree with the single minor on successfully completing all eight semesters of the UG Programmes either at a stretch or with opted exits and re-entries. In addition to this, student will receive a Bachelor's degree with Double Minor/Honours/ Research subject to earning additional 18-20 credits, the details of which is provided in the other section of this document.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

gl

(NEP VERSION: 01)

N-5.1.3 MULTIPLE EXIT B.TECH. UG PROGRAMME

Levels	Exit After	Qualification Title	Programme Credit requirements	Additional Mandatory Exit Credit requirements offered during summer vacation
4.5	1st Year Programme [2nd Semester]	One Year UG Certificate in Major Discipline	All Credits of I and II Semester	Total Credits: 08 1. Work-based vocational course-1: 03 credits 2. Work-based vocational course-2: 03 credits 3. Internship/ Apprenticeship: 02 credits of 4 weeks
5.0	2nd Year Programme [4th Semester]	Two Years UG Diploma in Major Discipline	I,II, III and	
5.5	3rd Year Programme [6th Semester]	Three Years B.Voc. in Major Discipline	All Credits of I,II, III,IV,V and VI Semester	Total Credits: 08 I.Skill-based vocational course : 03 credits 2.Mini Project : 03 credits 3.Internabity/ Apprenticeship : 02 credits of 4 weeks

N-5.1.4 Re-entry or Lateral Entry

• Students, opting for exits at any lével, will have the option to re-enter the programme from where they had left off, in the same or in a different higher education institution within four years of exit and complete the degree programme within the stipulated maximum period of eight years from the date of admission to first year UG. Re-entry at various levels for lateral entrants in academic programmes shall be based on the earned and valid credits as-deposited and accumulated in the Academic Bank of Credits (ABC) through Registered Higher & Technical Education Institutions (RHTEI) and proficiency test records. Lateral entry into the programme of study leading to the UG Diploma/ B. Vocational/ UG Bachelor's Degree with single minor/



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

ge

Je

(NEP VERSION: 01)

UG Bachelor's Degree with Double Minor/ Honours /Research will be based on the validation of prior learning outcomes achieved and subject to availability based on intake capacity. The instructions issued in this regard from the regulating authorities shall be applicable.

N-5.1.5 Eligibility for admission to the UG Bachelor's Degree with Double Minor/ Honours/Research

The Eligibility for admission to the UG Bachelor's Degree with Double Minor/ Honours /Research shall be as per UGC guidelines i.e. Minimum CGPA of 7.5 after second semester for UG Bachelor's Degree with Double Minor/ Honours and Minimum CGPA of 7.5 after sixth semester for UG Bachelor's Degree with Research.

N-5.1.6 Four Year of Bachelor's Technology Degree (Level 6.0) with various options.

- 1. Bachelor's Technology Degree in chosen Major Technology Discipline with Multidisciplinary Minor (164 credits)
- 2. Bachelor's Technology Honours Degree in chosen Major Technology Discipline with Multidisciplinary Minor (164 + additional 18-20 credits of Honours)

3. Bachelor's Technology Honours with Research Degree in chosen Major Technology Discipline with Multidisciplinary Minor (164 + additional 18-20 credits of Research)

 Bachelor's Technology Degree in chosen Major Technology Discipline with Double Minor (Multidisciplinary and Specialisation Minor) (164 + additional 18-20 credits of Specialization Minor).

Bachelor's Technology Degree in chosen Major Technology
 Discipline with Multidisciplinary Minor shall be awarded by earning
 164 credits of respective programmes.



ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

- The Bachelor's Technology Honours Degree in chosen Major Technology Discipline with Multidisciplinary Minor (164 + additional 18-20 credits of Honours) enables students to take up fivesix additional courses in the same Technology discipline of 18 to 20 credits distributed over semesters III to VIII. The decision regarding the mechanism of distribution of these 18-20 credits over semesters III to VIII shall be taken by Academic Authorities of the Institute.
- Under Bachelor's Technology Honours with Research Degree in chosen Major Technology Discipline with Multidisciplinary Minor (164 + additional 18-20 credits of Research), the students will work on a research project or dissertation for 18-20 credits in the fourth year in the respective Major Technology Discipline. The decision regarding the distribution of 18-20 credits for Research Project in Semesters VII and VIII of the Fourth Year shall be taken by Academic Authorities of the Institute. These 18-20 Credits will be over and above the 164 Credits prescribed for Four Year Multidisciplinary Bachelor's Degree in Technology Program.
- Under Bachelor's Technology Degree in chosen Major Technology
 Discipline with Double Minor (Multidisciplinary and Specialisation
 Minor) (164 + additional 18-20 credits of Specialization Minor),
 students would take up five-six additional courses of 18 to 20 credits in
 another Technology discipline/ Emerging Areas Specialization
 distributed over semesters III to VIII. The decision regarding the
 mechanism of distribution of these 18-20 credits over semesters III to
 VIII, which are over and above the 164 Credits prescribed for Four Year
 Multidisciplinary Bachelor's Degree in Technology, shall be taken by
 Academic Authorities of the Institute.





(NEP VERSION: 01)

N-5.2 Semester System

- N-5.2.1 The academic programmes in the Institute shall be based on semester system;
 two semesters one ODD Semester (June- November) and other EVEN
 Semester (December May) in a year with winter and summer vacations.
- N-5.2.2 The curriculum may consist of credit courses under various categories, mandatory courses and audit courses as recommended by the respective Board of Studies.
- N-5.2.3 Each credit course shall have a certain number of credits assigned to it depending upon the academic load of the course, which would be assessed on the basis of weekly contact hours of theory lecture, tutorial, laboratory classes and field study if required.

N-5.3 Outcome Based Education

- N-5.3.1 The Institute shall implement in true spirit the model of Outcome Based Education (OBE) as an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student is expected to have achieved the goal.
- N-5.3.2 The assessment process practiced by the Institute shall help in improving student learning. The process must help in gathering, analysing and discussing information from diverse sources to develop a deep understanding of what students know, understand value and can do as a result of their academic and cocurricular experiences at the Institute. The assessment process shall benefit in continuous improvement of the programme and effectively accomplishing the Institute's mission.
- N-5.3.3 The various aspects of Outcome Based Education (OBE) viz Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) will be implemented for each programme.
- N-5.3.4 Revised Blooms Taxonomy shall be followed for setting of Question papers.
- N-5.3.5 CO-PO/PSO Assessment tools and guidelines for CO-PO/PSO evaluation shall be approved by the respective BoS.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.

Je

(NEP VERSION: 01)

6. ACADEMIC COURSES

N-6.1 Curriculum Structure

N-6.1.1 The programmes will consist of:

- (a) Courses comprising of basic sciences, engineering sciences, humanities and social sciences including management;
- (b) Engineering core courses introducing the student to the foundations of engineering in his / her branch;
- (c) Electives enabling the students to take up a group of courses of interest to him/her. Two kind of electives are offered to the students:

 Programme Elective: This elective is offered to the student by the respective department.

 Open Elective: This elective can be opted by the student and shall be of other than a particular program.
- (d) Compulsory Multidisciplinary Minor Courses: The Minor courses may be from the different disciplines of the Engineering faculty, or they can be from different faculty altogether.
- (e) Vocational and Skill Enhancement Courses (VSEC) and Skill Enhancement Courses(SEC): These courses shall provide hands on Training to the students to acquire relevant skills.
- (f) Humanities Social Science and Management (HSSM) courses such
 as Ability Enhancement Courses (AEC),
 Entrepreneurship/Economics/ Management Courses, Indian
 Knowledge System (IKS) and Value Education Courses (VEC)
- (g) Experiential Learning Courses such as Project, Internship/ On Job Training, Field Projects(FP)/ Community Engagement Projects(CEP).
- (h) Liberal Learning Courses- Co-curricular Courses (CC)
- (i) Other technical industry oriented, contemporary courses, audit courses/ Environmental Engineering Courses / Industrial visits / Case study / Mini Projects / Site visits / Professional skills etc. as recommended by the Board of Studies.



(NEP VERSION: 01)

N-6.1.2	Each UG programme will have a curriculum and course contents (syllabi) for
	the courses designed by the BOS and approved by Academic Council.

N-6.1.3 The curriculum of any UG programme is designed to have credits of 164 for award of the Multidisciplinary Bachelor's degree based upon the Individual Programme. In case of admitted students through lateral entry in second year, credits shall be calculated from second year onwards and the minimum credit requirement for award of degree shall be 130 based upon the Individual Programme.

(The Multidisciplinary Bachelor's Degree curriculum scheme for 1st Year B.Tech., III-VIII Semester B.Tech.-CS, CD, CM, EE, ET & ME are attached as Annexure -I)

N-6.1.4 The medium of instruction, examination and project reports will be English.

N-6.1.5 Every UG student will have to earn the credits by passing all the credit courses as specified in N-6.1.3 and will have to earn 'P' grade in all the audit courses (non credit courses) to become eligible for award of the Degree.

N-6.2 Course Codes

Each course offered shall have an alphanumeric course code consisting of a string characters.

N-6.2.1 For First year Engineering (UG),

The example Course Number is illustrated in the following figure no. N-6.2.1(a) and N-6.2.1(b).

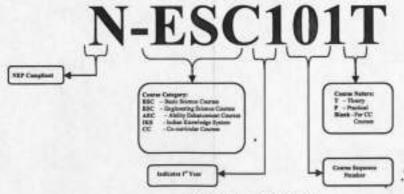


Figure no. N-6.2.1(a)



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

le

(NEP VERSION: 01)



Figure no. N-6.2.1(b)

N-6.2.2 For Third Semester to Eight Semester Engineering (UG)

The example Course Number is illustrated in the following figure no. N-6.2.2.

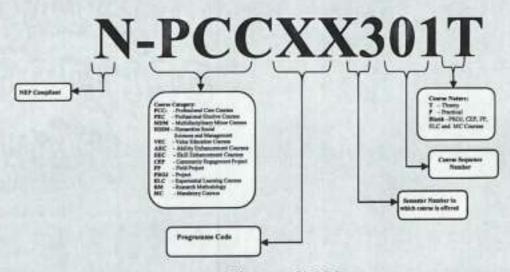


Figure no. N-6.2.2







(NEP VERSION: 01)

N-6.3 Course Credits

N-6.3.1 Each credit course shall have an integer number of credits, which reflects its weight. The student earns credits by passing corresponding courses in minimum 'P' grade in theory and practical course examination.

N-6.3.2 The number of credits of a course in a semester shall normally be calculated as under(however there may be some exceptions):-

> Lectures &Tutorial: One lecture or tutorial hour per week shall be assigned one credit.

> Practical: One laboratory hour per week shall be assigned half credit. Not more than two credits may be assigned to a practical course having only laboratory component.

Project: One project hour per week will be assigned half credit.

Studio activities: Studio activities involve the engagement of students in creative or artistic activities. Every student is engaged in performing a creative activity to obtain a specific outcome. Studio-based activities involve visual- or aesthetic-focused experiential work. A minimum of 26-30 hours in studio activities per credit in a semester is required.

Workshop-based activities: Courses involving workshop-based activities require the engagement of students in hands-on activities related to work/vocation or professional practice. Every student is engaged in performing a skill-based activity. Related to specific learning outcome(s). 26- 30 hours of workshop-based activities per credit in a semester is required.

Seminar/ Group Discussion: 13-15 hours of participation in seminar/ Group Discussion activity per credit in a semester is required.

Internship: Credits for internship shall be one credit per two weeks of internship (or 36-40 hours of engagement).

Field-based Learning/ Practices: These are the courses requiring students to participate in field-based learning/projects generally under the supervision of faculty. A minimum of 26-30 hours of learning activities per credit in a semester is required.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

h

(NEP VERSION: 01)

Community Engagement Projects: These are the courses requiring students to participate in field-based learning/projects generally under the supervision of faculty. The curricular component of 'community engagement and service' will involve activities that would expose students to the socio-economic issues in society so that the theoretical learnings can be supplemented by actual life experiences to generate solutions to real-life problems. 26-30 hours of contact time per credit in a semester along with 13-15 hours of activities such as preparation for community engagement and service, preparation of reports, etc., and independent reading and study with 2 credit course.

N-6.4 Courses of Special Nature

N.6.4.1 For UG Programme:

Project

A curriculum shall contain a credit for project, offered in the semesters of the UG programme. Not more than six students can carry out the project together. The batch formation norms and allotment of guide shall be carried out by concerned Department.

Offering an Elective

Program Elective

Program elective course in a department shall run only if minimum of 20 students register for it in a regular semester. However, under special circumstances, a course may run with fewer students with prior permission of the Chairman, Board of Studies. If additional full time faculty is required, approval of the Principal is necessary.

Open Elective

Rules laid down by the academic authorities in this regard shall be applicable.







ACADEMIC RULES AND REGULATIONS 2023-24 (NEP Version: 01)

Multidisciplinary Minor

Rules laid down by the academic authorities in this regard shall be applicable.

Internship /On Job Training[OJT]

Expected Learning Outcomes after the Internship /On Job Training

- · Exposure to organizational skills and professional practices.
- · An ability to work under supervision and directions.
- An ability to efficiently complete tasks, foster good relationship with seniors and subordinates.
- Improved communication & interpersonal skills.
- Knowledge of work ethics of the company/ industry/ Institutions/social organizations etc.
- Knowledge of the company/industry/Institutions/social organizations etc. and its governing operation standards.
- Knowledge of expectations of the company /industry in general on employees.
- Exposure to latest technology applications to the specific discipline.
- Opportunity of identification of relevant problems in the company/industry/Institutions/social organizations etc. and provide acceptable solutions.
- Opportunity to familiarize with the industry of their discipline, experience work culture and discover the organizations within the industry. Also acquire interpersonal skills through meeting with professionals in their field of study.
- Opportunity to correlate theoretical lessons and principles with practical applications. Acquire practical skills and experience working on projects alongside industry experts.
- Opportunity to discover grass root problems and fundamental issues in industry with a view to take up major project and development of innovative solutions.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

(NEP VERSION: 01)

N-6.5 Starting of new Course

N-6.5.1 The Institute is free to start diploma (UG and PG) or certificate courses without the prior approval of the university. Diplomas and certificates shall be issued under the seal of the Institute.

7. ADMISSION, ENROLLMENT, REGISTRATION & ABC

other competent authorities.

N-7.1 Admission

N-7.1.1	The admissions for UG Programmes are done strictly on Merit basis in transparent manner in accordance with the rules and regulations of DTE Maharashtra State.
N-7.1.2	The Institute shall follow norms for eligibility of the students for admission to various Programmes as per the competent authority.
N-7.1.3	There is a provision for candidates with Diploma in Technical Education and also the students who are B.Sc. graduates to join UG Degree programmes for the lateral entry in the second year of the 4-year programme as per the prevailing practice in the University.
N-7.1.4	The students with B.Sc. degree taking admission to second year level shall have to appear, additionally, for theory and practical (if applicable) examination of all Engineering Sciences(ESC) category courses of First year (applicable programme).
N-7.1.5	The Institute follows admission procedure strictly as per Government of Maharashtra.
N-7.1.6	The intake of students for the various Programmes shall as per AICTE and





(NEP VERSION: 01)

N-7.2 Enrollment

N-7.2.1

The students admitted to the programmes offered by the institution will be enrolled with Rashtrasant Tukadoji Maharaj Nagpur University(RTMNU) with adherence to its due procedures, soon after the admission, if he/she was not enrolled earlier. The candidature of the student will be provisional till his/her enrolment is accepted and a University Enrollment Number is assigned by the RTMNU.

N-7.3 Registration

N-7.3.1 Every student admitted shall have his/ her unique Student ID. The ID of a student shall consist of alpha-numerals. PPnnSSS

Where,

PP: Indicates programme code (Exception: For MBA programme code MB to be used for uniformity)

nn: Indicates year of admission,

SSS: Indicates Student serial number.

For Lateral Entry Students, PPnnDSSS

Where,

PP: Indicates programme,

nn: Indicates year of admission,

D: Indicates Lateral Entry.

SSS: Indicates Student serial number.

For Students transfer from Other Institute, PPnnTSSS

Where,

PP: Indicates programme,

nn: Indicates year of admission,

T: Indicates transfer from Other Institute.

SSS: Indicates Student serial number.

Change of Programme, PPnnTQQSSS

Where,

PP: Indicates programme (Old),

nn: Indicates year of admission,

T: Indicates Transfer of Programme.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

le

(NEP VERSION: 01)

QQ: Indicates Transfer to Programme (New).

SSS: Indicates Student serial number.

- N-7.3.2 Registration at the beginning of each year, on the prescribed dates announced from time to time, by payment of the stipulated fees along with duly filled in admission form is compulsory for every student till he/she completes the Programme.
- N-7.3.3 Registration, according to rules, should be carried out in the allotted duration. Late registration may be permitted only for valid reasons and on payment of a late registration fee. Students having outstanding dues to the Institute shall be permitted to register only after clearing the dues.
- N-7.3.4 In-absentia registration may be allowed only in rare cases at the discretion of the Principal/Dean Academics in case of circumstances beyond the control of students.

N-7.3.5 For UG Programme:

- For being eligible to register for (or take admission in) Semester III, student must have earned at least 40% of the total credits (rounded off to nearest lower integer) in first year (Semester I & II together).
- For being eligible to register for (or take admission in) Semester V, student
 must have completed successfully all courses including audit courses &
 earned all the credits offered in first year and earned at least 40% of the
 total credits (rounded off to nearest lower integer) in second year (Semester
 III & IV together).
- For being eligible to register for (or take admission in) Semester VII, student
 must have completed successfully all courses including audit courses &
 earned all the credits offered in first & second year and earned at least 40%
 of the total credits (rounded off to nearest lower integer) in third
 year(Semester V & VI together).
- N-7.3.6 The student admitted for regular UG course shall not undertake any full time course of study in any university/college/institution. The student admitted for regular UG course shall not undertake any full time employment during the period of the programme.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.

4

ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

N-7.4 Change of Branch

N-7.4.1 A student seeking change of branch at III semester must have earned all the credits of I and II semesters. The change of branch shall be effected as per the rules and norms approved by the Government/Competent authority from time to time.

N-7.5 Equivalence and Absorption of students

- N-7.5.1 The students from University pattern, desirous of seeking admission to III, V and VII semester in autonomous pattern, has to fulfill the prevailing ATKT norms of University, to become eligible for admission. However, such students have to clear backlog subjects (courses) if any, by appearing for the respective examinations of University. The norms of absorption/equivalence shall be decided by the Academic Council on the recommendations of the Equivalence Committee from time to time. These students shall be absorbed by obtaining the permission from the competent authority and following all its guidelines.
- N-7.5.2 For the courses (compulsory/ elective/any other course) of all UG programmes which are closed by the respective department in a semester of a particular academic session, maximum four consecutive (as and when the examination is conducted) available attempts will be provided to pass these courses.

 Thereafter, the student shall be absorbed in new Autonomous scheme, as per the equivalence scheme of respective BoS.
- N-7.5.3 While switching from University pattern to autonomous pattern the CGPA of such student shall be calculated from the SGPA obtained in previous semesters in the university pattern.

While switching from University pattern(where Credit base system is not available) to autonomous pattern the SGPA/ CGPA of such student shall be calculated as per following formula,

SGPA/ CGPA=(Percent marks/10) + 0.75





ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 0 i)

N-7.5.4 For direct admission to second year by transfer from other Institute, the calculation of CGPA shall be governed by N-7.5.3 in case the SGPA/CGPA is not mentioned in the mark list. For direct admission to second year by lateral entry (after Diploma), the calculation of CGPA shall be done from III semester onwards.

N-7.6 WITHDRAWAL

- N-7.6.1 A student who wants to withdraw from a semester/year shall apply through the HOD to the Principal, on a prescribed form within one week from the end of the Class Assessment Examination(CAE)-1 and it will be recorded in the registration record of the student. The student will be awarded a withdrawal grade 'W' at the end of the semester.
- N-7.6.2 In case a student is unable to attend classes for more than four weeks in a semester, he/she may apply to the Principal through HOD for withdrawal from the semester/year.
- N-7.6.3 In case the period of absence on medical grounds is more than four weeks working days during the semester, a student may apply for withdrawal from the semester/year, if he/she so desires. But such an application must be made to the Principal through HOD, as early as possible and latest before the beginning of End Semester Examination.

N-7.7 Academic Bank of Credits

N-7.7.1 It is compulsory for all students to get registered and enrolled on Academic Bank of Credits ABC, create ABC ID, and share their ABC ID with the Institute. Credits Earned by the student shall be reflected in the student's ABC account.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

H

(NEP VERSION: 01)

8. ASSESSMENT & EVALUATION

N-8.1 Examination Scheme

In a semester, a student shall be evaluated for his/her academic performance in a theory & practical credit course through Continuous Evaluation and End Semester Examination (ESE). All the examinations shall be conducted as per the syllabi prescribed by the respective BOS and approved by the Academic Council for UG programmes.

Course	Examinations	Weightage	
	Class Assessment Examination (CAE)	20%	
Theory Course	Teachers Assessment Examination (TAE)	20%	
	End Semester Examination (ESE)	60%	
Environ version v	Continuous Assessment Examination (CAE)	50%	
Practical Course	End Semester Examination (ESE)	50%	

N-8.2 Question Paper Pattern

For an effective assessment of learning outcomes of students, the question paper for Class Assessment Examination (CAE) and End Semester Examination (ESE) shall:

- Cover all sections of the course syllabus uniformly.
- Each UNIT shall comprise of two questions, out of which student shall have a choice to attempt any one.

N-8.3 Theory Course

The marks distribution discussed in this section is for Theory Courses comprising of 100 marks and Six Units.

N-8.3.1 Continuous Evaluation:

Continuous Evaluation	Marks
Class Assessment Examination (CAE)	20
Teachers Assessment Examination (TAE)	20



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.

Il

(NEP VERSION: 01)

N-8.3.2 Class Assessment Examination (CAE)

Compo	ients		Marks
CAE-I	Subjective test (30 M)	CAE Marks awarded as:	
CAE-I	Objective test (10 M)	{0.8 (Max. of CAE - I &II) + 0.2 (Min. of	20
CAE-II	Subjective test (30 M)	CAE-1 &II)}/2	
	Objective test (10 M)		

For theory subjects, during the semester, there shall be two Class Assessment examinations and their syllabus for subjective and objective parts shall along with their duration shall be as:

Name of Examination	Syllabus	Subjective	Objective	
CAE-I	50% Syllabus	Duration: 90 min. 3 Q × 10 M	Duration: 20 min	
CAE-II	Remaining 50% Syllabus		20 MCQ × ½ M	

N-8.3.3 Teachers Assessment Examination (TAE)

For evaluation under Teachers Assessment Examination(TAE), total three TAE parameters shall be considered.

Table No. N-8.3.3 [a]

TAE	Weightage
TAE-I	50%
TAE-II	25%
TAE-III	25%

TAE-I (Table No. N-8.3.3 [b]) shall have weightage of 50% in assessment against TAE.

Table No. N-8.3.3 [b] TAE-I

TAE Parameter	All Semester B.Tech. programmes
TAE-I	Experiential Learning Assessment [Project Based Learning/Activity Based Learning/ Problem Based Learning/ Case Study etc.]





(NEP VERSION: 01)

The Course Co-coordinators have flexibility to choose and consider any two distinct parameters against TAE-II & TAE-III from Table No. N-8.3.3 [c] which shall have weightage of 25% each in the assessment against TAE.

Table No. N-8.3.3 [c] TAE-II &TAE-III

Sr. No.	I/II Semester B.Tech.	III-VIII Semester B.Tech.
1	Quiz	Industry Expert Assessment
2	- Surprise Test	Creative Assignment
3	Home Assignment	Attendance in Class
4	. Attendance in Class	Technical Poster
5	Seminar	Seminar
6	Open Book Test	Open Book Test
7	Any Other with Approval from Chairman, BoS	Any Other with Approval from Chairman, BoS

The evaluation of the TAE shall be carried out by the Course Coordinator based upon the student's performance.

A student who skips teacher's assessment or a part thereof shall be awarded zero marks under the respective head.



(NEP VERSION: 01)

N-8.3.4 End Semester Examination (ESE)

 For all the theory subjects, the end semester examination pattern will be as given below.

Name of Examination	Syllabus	Subjective
and Semester	All Units	Duration: 180 min.
examination	100% Syllabus	6 Q × 10 M

- End Semester examination shall be conducted as per the schedule in Academic Calendar. Detail time-table of End Semester Examinations shall be prepared and disseminated by the office of Controller of Examination. End Semester examination will be of three-hour duration (or as per the SoE). The duration and number of questions of examination may vary as per the need of the theory course.
- For Theory Courses with 50 marks, proportionate distribution of marks shall be carried out.
- For Theory Courses with no. of Units not equal to six, proportionate distribution of no. of questions shall be carried out.

N-8.3.5 Re-sit Examination for Theory Courses

- A student who remains absent for End Semester examination, shall be awarded 'Ab' Grade in end semester examination and shall be eligible for resit examination.
- If a student is eligible for 'F' grade shall be allowed to appear for the re-sit
 examination of corresponding end semester examination. The re-sit
 examination shall be conducted within one month from the declaration of
 results of the end semester examination. Re-sit examination shall be for end
 semester examination of that academic semester only.

The attempts pattern would be as per table shown below:



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

de

(NEP VERSION: 01)

B.Tech. Programme:

Semester	Regular Winter	Resit Winter	Regular Summer	Resit Summer
1	Yes	Yes	Yes	Yes
II	Yes	Yes	Yes	Yes
III	Yes	Yes	Yes	
IV	Yes		Yes	Yes
V	Yes	Yes	Yes	
VI	Yes		Yes	Yes
VII	Yes	Yes	Yes	**
VIII	Yes		Yes	Yes

N-8.4 Practical Course

A student shall be evaluated for his / her academic performance in a practical course on the basis of continuous evaluation & one end semester practical examination.

N-8.4.1 The syllabus of a practical shall specify the list of practical / experiments to be done in a semester which may include some open ended experiments.

N-8.4.2 Continuous Evaluation

Continuous assessment covering 50% evaluation on the basis of his/ her performance in each practical, journal completion, internal examination and viva-voce.

Table: N-8.4.2 Continuous Evaluation:

Continuous Evaluation (25 Marks)	Marks
*Day to Day Performance	15
Internal Practical Examination	05
Viva-Voce	05
Total	25

^{*} The rubrics of distribution of marks shall be as per the guidelines of Office of Dean Academics



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

(NEP VERSION: 01)

N-8.4.3 End Semester Examination

There shall be one end semester practical examination with viva-voce covering 50% evaluation.

End Semester Examination

End Semester Examination (25 Marks)	Marks
End Semester Practical Examination	15
Viva-Voce	10
Total	25

N-8.4.4 In case of performance oriented practical, the evaluation shall be done on the basis of performance in practical examination and viva-voce. Mode of examination for non-performance type of practical shall be declared by the course coordinator in the beginning of the session. Type of practical course i.e. performance type or non performance type shall be decided by the respective BOS.

N-8.4.5 Re-sit Examination for Practical Courses

- A student who remains absent for End Semester examination of Practical/
 Project Courses and awarded with 'Ab' Grade in end semester examination shall be eligible for resit examination.
- If a student is eligible for 'F' grade in Practical/ Project Courses, he/she shall
 be allowed to appear for the re-sit examination of corresponding end semester
 examination. The re-sit examination shall be conducted within one month
 from the declaration of results of the end semester examination. Re-sit
 examination shall be for end semester examination of that academic semester
 only.
- Practical/ Project Courses with no end semester examination in the curriculum scheme are excluded from Resit examinations.
- The attempts pattern of Resit Examination of Practical/ Project Courses would be same as per the tables of Regulation no. N-8.3.5.



(NEP VERSION: 01)

N-8.5 Mandatory Audit Course

N-8.5.1 For Mandatory Audit courses (non-credit courses), there should be an internal evaluation for 25/50 marks. A candidate has to secure a minimum of 50% of marks to be declared successful. The course coordinator shall decide and declare the mode of evaluation for the audit courses within the date prescribed by the Dean Academics.

N-8.5.2 There shall be NO external evaluation. For non credit courses 'P' grade for Pass or "F' grade for Fail shall be indicated on Grade Card and it will not be counted for the computation of SGPA/CGPA.

N-8.6 Internship

N-8.6.1 One Semester Internship/ On Job Training:

The one semester Internship/ On Job Training shall be offered during VIII Semester.

Schedule: During 8th Semester.

Duration: One Semester.

Credits: 12

Assessment & Evaluation:

Total Marks: 200 marks Continuous Evaluation: 100 marks End Sem. Exam: 100 marks





ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

N-8.7 Project Course

N-8.7.1 Project

Continuous Evaluation

For Project Course there shall be continuous evaluation during the semester as per the curriculum scheme. The continuous evaluation shall be on the basis of regular assessment by the project guide/ supervisor and two review seminar conducted by the Project Review Committee (PRC).

The PRC shall consist of Head of the Department, Project Coordinator and one domain specialized Senior Faculty member of the department.

The following criteria for continuous evaluation must be followed:

S. No.	Criterion	Weightage
. 1	Regular Assessment	40 %
2	Two Review Seminar	60 %

End Semester Examination

The end semester examination for project work shall be held by a committee consisting of an External Examiner, Head of the Department and Project Guide. The average of the marks awarded by the committee members shall be taken into consideration in case of variation among the members.

The following criteria for evaluation must be followed:

Sl. No.	Criterion	Weightage
1	Project Report	40 %
2	Presentation and Viva Voce	60 %

N-8.8 Liberal Learning Courses/ Indian Knowledge System/ Ability Enhancement Course of IV Semester B.Tech./ Value Education Courses/ Comm. Engg. Project/ Field Project

N-8.8.1 For these credit courses, there shall be only internal evaluation for 50 marks. A



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

A

(NEP VERSION: 01)

candidate has to secure a minimum of 50% of marks to be declared successful.

The course coordinator shall decide and declare the mode of evaluation for these courses.

N-8.8.2 The absolute grading system shall be followed for these courses and the letter grade and grade points as mentioned in the grading section of this document shall be considered for the computation of SGPA/CGPA.

N-8.9 Incentive Scheme

Incentive scheme for achievement/ participation in Co-curricular Learning, SRC, T&P, Student Forum/Professional Body, R&D, Incubation, Sports, NSS, UBA, NCC, Extracurricular(Cultural) activities and GATE Examination

- N-8.9.1 The achievement/participation of any undergraduate or postgraduate student (admitted to any UG programme), in various co-curricular/ extra-curricular activities will be treated as an additional course and shall be awarded grade points as follows from the academic year 2023-24.
- N-8.9.2 For award of incentive marks, student shall be required to submit an application with required proofs/certificates/endorsement received from respective Incharge's to the HoD. of parent department.
- N-8.9.3 Evaluation of student for SRC, NCC, NSS, UBA, Sports, Incubation and T&P shall be done by respective faculty Incharges/Cell. Evaluation for achievement/participation in remaining activities, compilation of all incentive marks and submission of final incentive marks to CoE shall be done by parent department of the student. Summation of all incentive marks put together for different achievements/activities should not go above 100 marks in a semester. Students will not be eligible for incentive if any of the parameter for which the incentive marks are claimed by student, is a part of curriculum.

The award of grade points based on absolute marks out of 100 shall be made as follows:

Grade Points	Range of Marks
10	91-100
9	81-90
8	71-80
7	61-70
6	51-60
5	41-50
4	31-40
0	Less than 31



(NEP VERSION: 01)

N-8.9.4 The guidelines for award of incentive marks for all above activities are detailed as under:

1) Co-curricular Learning

Sr. No.	Particulars	Incentive Marks
1	Offline or online certificate course of minimum 30 Hrs duration offered by IITs / IIMs / IIITs/ NITs / Department of Ministries, Govt. of India/MOOCs / Premier organizations / Professional bodies/ Others (as approved by the parent department) (Course Passed)	80
2	Offline or online certificate course of minimum 20 Hrs duration offered by IITs / IIMs / IIITs/ NITs / Department of Ministries, Govt. of India / MOOCs / Premier organizations / Professional bodies/Others (as approved by the parent department) (Course Passed)	60
3.	Successfully passing the PPAT examination (Pre- Placement Assessment Test) related to placements organized by T&P Cell of the Institute.	40

- Student will not be eligible for incentive in case, if any of the above stated parameters is a part of curriculum.
- Incentives shall be awarded subject to approval of the online / offline MOOCs by the concerned department and passing of the examination conducted for that course.

2) SRC, T&P, Student Forum & Professional Body

Sr. No.	Particulars	Incentive Marks
1	Extra-ordinary performance/contribution by SRC Office Bearers	50-70
2	Extra-ordinary performance/contribution by other members of SRC Team	30-40
3	Branch wise student placement coordinators	40
4	Extra-ordinary performance/contribution by Professional Body Office Bearers	50-70
5	Extra-ordinary performance/contribution by other members of Professional Body	30-40
6	Extra-ordinary performance/contribution by Student Forum Office Bearers	40-50
7	Extra-ordinary performance/contribution by other members of Student Forum	20-30





(NEP VERSION: 01)

Office bearers are persons holding the key posts such as President, Vice-President, Secretary, Joint Secretary & Treasurer.

For Extra-ordinary performance/contribution, respective faculty In-charge shall assess through proper rubrics and certify the evaluation in consultation with the Principal of the Institute.

3) R&D Activities

The student participating in Research, Development and Consultancy is eligible for award of incentives as per the following table:

Sr. No.	Particulars	Incentive Marks
A	Research-Development/Consultancy Projects:	
1	Winner in research/innovation/Project competitions of repute, organized by IITs / IIMs / IIITs / NITs/other institutes having NIRF rank/Departments of Ministries, Govt. of India/Premier organizations/Professional bodies	80
2	Participation in research/innovation/Project competitions of repute, organized by IITs/IIMs/IIITs/ NITs/other institutes having NIRF rank/Departments of Ministries, Govt. of India/ Premier organizations/Professional bodies.	60
3	Participation in Research/Consultancy projects of the Institute	60
4	Patent filed jointly with the Institute	100
В	Research Publications:	
1	Research Paper accepted for publication in journal indexed in Science Citation Index (SCI)/ Scopus/Emerging Sources of Citation Index (ESCI)	100
2	Research Paper accepted for publication in Indexed journal other than SCI, SCOPUS, ESCI	60
3	Research Paper accepted and presented in conference organized by IITs/IIMs/IIITs/NITs/ other Institutes having NIRF rank/Premier organizations/ Professional bodies.	80

- Student will not be eligible for incentive in case, if any of the above stated parameters is a part of curriculum.
- If more than one student is involved, the marks awarded will be divided equally amongst the students.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

H

(NEP VERSION: 01)

4) Incubation related activities: The students participating in incubation related activities are eligible for the award of incentives as per the following table:

Sr. No.	Particulars	Incentive Marks				
1	Incubation Stages :					
	i) Pre-incubation Stage	40				
1	ii) Incubation Stage	60				
	iii) Start-up Phase	80				
2	Participation in Inter collegiate Business Competitions organized by IIMs/IITs and any other nationally renowned Organization / Professional Bodies	60				
3	Securing any top 3 positions held at IIMs/IITs and any other nationally Organization/Professional Bodies					
4	Seed Funding Support Received for start-ups in Lakhs:	-				
	i) 1-3 Lakhs	60				
	ii) 3-5 Lakhs	80				
	iii) more than 5 Lakhs	100				
5	Selection for Incubation/acceleration phase at IIM/IITs/ Nationally Renowned Organization/ acquisition by firm.	100				

- If more than one student is involved, the marks awarded will be divided equally amongst the students.
- Note: Incentives for start-up related activities shall be offered subject to fulfillment
 of the criteria & guidelines decided by the EDC Cell from time to time and after due
 scrutiny by EDC Cell In-charge.
- 5) Sports / NSS /UBA/ NCC activities: The students special achievements in Sports/NSS/UBA/NCC etc. is eligible for the award of incentives as per the following:

Sr. No.	Parameter	Incentive Marks
1	Participation in University Sports	51-60
2	Securing I/II/III Place in University Sports	71-80
3	West Zone/ Inter University/ National level Participation (Sports/NSS/NCC)	100



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

A

(NEP VERSION: 01)

Students participating/ securing positions in the above activities shall be awarded Incentive marks individually.

6) Extra-Curricular(Cultural) Activities

Sr. No.	Particulars	Incentive Marks
1	Participation in Inter collegiate University level competitions	40
2	Winners in Inter collegiate University level competitions	60
3	Participation in Inter University/National level competitions	100

Students participating/ securing positions in the above activities shall be awarded Incentive marks individually.

7) Any Other Development Activities

Sr.No.). Particulars					
1	Significant contribution towards Institutional/ Departmental level activities as certified by the Head of Department and approved by Chairman, Academic Council	40				

N-8.8.5 Performance in GATE Examination: The following incentive scheme shall be applicable for the performance of student in GATE Examination:

- A student of the Institute who is pursuing B. Tech. programme, and who has
 qualified GATE examination with valid pass score as certified by the competent
 authority, shall be eligible for the award of GATE incentive-grade points (IP_G) after
 the completion of VIII Semester subject to submission of written request by the
 student along-with necessary supporting documents. This will be effective from
 academic year 2026-27.
- The GATE incentive grade points (IP_G) awarded after qualifying GATE shall be over and above the incentive marks / grade points awarded against Co-Curricular, Extra Curricular and other activities of the Incentive Scheme.
- The GATE incentive grade points (IP_G) will be decided such that there should be an addition of 0.1 in CGPA with a maximum limit of CGPA equal to 10.

Sr. No.	Scheme	GATE incentive- grade points (IP _G)	Rise in CGPA (VIII SEM) due to (IP _G)
1.	UG schemes of 164 credits	16.4	0.1

 The incentive-grade points (IP_G) shall be used for the calculation of CGPA of VIII Semester as under, after successful completion of the programme in which the student was admitted, as per regulations:

$$\text{CGPA} = \frac{\sum C_j P_j + \sum C_{al} P_{al} + I P_G}{\sum C_j}$$



Where,

C_j = the number of credits for the jth course up to the semester for which CGPA is to be calculated.

P_i = Grade points earned in the jth course.

j = 1,2,.....,m represent the number of courses in which a student is registered up to the semester for which the CGPA is to be calculated. The CGPA is also calculated to two decimal places.

Cal; Incentive credit in semester

Pat=Grade point for participating in incentive activities in semester

 IP_G =GATE incentive grade points.

CGPA is rounded up to two decimal places and shall not exceed 10.

N-8.10 Paper Showing and Grievance Handling

N-8.10.1 Valued answer books shall be shown to the students within ten working days after the last day of theory examination i.e. on open day. Grievances, if any, shall be communicated by the students to the CoE office through Grievance forms within prescribed time limit, appropriate action will be taken by CoE office as per the Examination Guidelines.

N-8.11 Revaluation

N-8.11.1 End Semester Examination

- a) As per the notification issued by the Controller of Examinations, the students can submit the applications for revaluation, along with the requisite fee receipt for revaluation of his/her answer-sheet(s) of theory course(s), if he/she is not satisfied with the marks obtained.
- The Controller of Examinations shall arrange for re-evaluation of those answer-sheet(s).
- c) A new valuer, other than the first valuer, shall re-evaluate the answer sheets).
- d) After revaluation, if the change in the marks is more than or equal to ±5% of the total marks of that examination, then the revaluated marks shall be considered as final marks else there shall be no change in the marks.





N-8.12 Forego

N-8.12.1

An examinee securing 'F' or 'I' grade in any course of an examination of a programme shall have an option to forego his/her continuous assessment marks in a course or courses. In such cases he/she shall be examined for a total marks comprising theory/practical end semester examination and continuous assessment together, at his/her successive attempt at the examination. Such an option can be availed by an examinee in case he/she is appearing for the successive attempts at the examination as ex-student for that particular course. A student who is detained from appearing in an examination in a course(s) for lack of attendance can exercise the option of forego in successive attempts at the examination as ex-student. To avail this, the examinee would indicate the same in his or her 'Application for the examination' and the option once exercised, shall be 'Final and Binding' on the examinee concerned for all the subsequent examinations in that course. For the examinee opting for forego, his/her marks in continuous assessment shall be ascertained proportionately on the basis of his/her marks in the end semester examination of that course.

An examinee can opt for forego of his/her marks in continuous assessment of a practical course only after submission of 'Term work completion' certificate issued by the concerned head of the department along with the 'Application for the examination'.

The decision in this regard taken by the Chairman of the Academic Council will be final."

(NEP VERSION: 01)

9. ATTENDANCE, ABSENCE, LEAVE RULES AND DISMISSALS

- N-9.1 All the students are expected to be present in every lecture, tutorial, practical and other allotted hours in the time table. Attendance will be closely monitored during a semester by the concerned department.
- N-9.2 If a student is continuously absent from the classes for more than four weeks without informing the Course Coordinator, the Coordinator shall immediately bring it to the notice of the Head of the concerned department as the case may be and they in turn will inform the same to the Office of Dean Academics.
- N-9,3 The names of the students who have remained absent, for more than 25% of the actual classes held in a course will be intimated by the Course Coordinator himself/herself on the last teaching day of each month of the respective semester, to the students in the class with written intimation to the HOD, who will arrange to consolidate the list for all such students for all the courses and display it on the notice board of the department with an intimation to Dean Academics. Warning Letters shall be issued to the parents of concerned students by the department and its acknowledgement record shall be well maintained.
- N-9.4 A student must have an overall 75% attendance of the total number of classes including lectures/ tutorials and practicals for appearing in the end semester examination.

N-9.5 Condonation of Attendance:

Condonation of attendance can only be considered in case the overall attendance of the student is minimum 60%.

A deficiency of overall attendance to the extent of 15% may be condoned by the Principal on the recommendation of Head of the Department on being satisfied that the same deficiency in attendance was due to circumstances beyond the control of the student.

For availing such Condonation, a student will have to apply to the Head of concerned department along with requisite documents. However the decision in this matter will be finally taken by the Principal.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

(NEP VERSION: 01)

N-9.6

In case the condonation of attendance have been rejected or overall attendance is below 60% of the total number of classes including lectures/ tutorials and practicals, his/her attendance in individual courses shall be considered. If in any course his/her attendance is minimum 60%, he/she shall be eligible to appear in end semester examination of that course. If the attendance in a particular course is below 60% of such student[s], he/ she shall not be eligible to appear for the regular end semester examination and its resit examination[if any] and shall be awarded 'l' grade in that course. This grade shall appear in the grade card till the successful completion of course requirements of that course. These students shall be eligible to appear in the successive end semester examination[s] and corresponding resit examination[s] [if any]. The marks earned by such students in continual evaluation in that Course shall remain unchanged, however the option for forgo shall be available in the 'Application for Examination' as ex-student.

An examinee securing 'I' grade in any course of an examination of a programme shall have an option to forego his/her continuous assessment marks in a course or courses. In such cases he/she shall be examined for a total marks comprising theory/practical end semester examination and 'continuous assessment together, at his/her successive attempt at the examination. Such an option can be availed by an examinee in case he/she is appearing for the successive attempts at the examination as ex-student for that particular course. A student who is detained from appearing in an examination in a course(s) for lack of attendance can exercise the option of forego in successive attempts at the examination as ex-student. To avail this, the examinee would indicate the same in his or her 'Application for the examination' and the option once exercised, shall be 'Final and Binding' on the examinee concerned for all the subsequent examinations in that course. For the examinee opting for forego, his/her marks in continuous assessment shall be ascertained proportionately on the basis of his/her marks in the end semester examination of that course.

An examinee can opt for forego of his/her marks in continuous assessment of a practical course only after submission of 'Term work completion' certificate





(NEP VERSION: 01)

issued by the concerned head of the department along with the 'Application for the examination'.

The decision in this regard taken by the Chairman of the Academic Council will be final.

10. GRADING

N-10.1 The Grading System

- N-10.1.1 For every course taken by a student, he/she shall assign a grade based on his/her combined performance in all components of evaluation scheme of a course. The grade indicates a qualitative assessment of the student's performance and is associated with equivalent number called a grade point.
- N-10.1.2 The academic performance of a student shall be graded on a ten-point scale following guidelines Table N-10.1.2

TABLE N-10.1.2

Academic Performance	Grades	Grade Points
Outstanding	0	10
Excellent	A+	9
Very Good	A	8
Good	B+	7
Above Average	В	6
Average	. С	5
Pass	P	4
Fail	F	0
Incomplete Course requirements (Detention)	1	
Temporary Withdrawal	W	
Non Completion of Project, Extension in Projects	х	15
Absent in Examination	Ab	1 .





(NEP VERSION: 01)

Explanation:

'F' Grade

- The 'F' grade denotes poor performance amounting to failure.
- A student has to repeat all courses in which he/ she obtains 'F' grade, till a
 passing grade is obtained.
- For the elective courses in which 'F' grade has been obtained, the student has to take the same course.

'Ab' Grade:

This grade indicates absence in End Semester Examination

'W' Grade:

This refers to withdrawal from the semester/year as per the regulations.

'X' Grade:

This grade is awarded for incomplete Project work and will be converted to a regular grade on the completion of the Project work and its evaluation.

'I' Grade:

This grade stands for non-completion of course requirement (Detention).

- N-10.1.3 The letter Grades (up to 'P' only in theory courses and practical courses) awarded to a student in all the credit courses shall be converted into a SGPA and CGPA to be calculated as given in Regulation N-10.9.
- N-10.1.4 For computation of Standard Relative Grades, for the evaluation of the academic performance of an examinee in a course, in Re-Sit/immediate consecutive Backlog Examination, the Mean and the Standard Deviation would be the same as the Mean and Standard Deviation in the End Semester Examination for which the Re-Sit Examination was conducted. For further consecutive backlog examinations, the mean and standard deviation would be calculated with the regular examinee of that course.
- N-10.1.5

 A student passing a course in Re-Sit examination shall be treated as having cleared the course in First Attempt.
- N-10.1.6 In case, an ex-student appears for examination of the course along with regular students appearing in that course then the cut-off marks of the regular examination shall be applicable.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.

9

(NEP VERSION: 01)

N-10.2 Guidelines for Award of Grades

Following are the general guidelines for the award of grades:

- a) In general standard relative grading system will be followed.
- b) In any case, if the number of regular students opting a given subject is less than or equal to 30 of UG programme, the grades will be awarded as per absolute grading system. Also for Seminar/Project Course/ Liberal Learning Courses/ Indian Knowledge System/ Ability Enhancement Course of IV Semester B.Tech./ Value Education Courses/ Community Engagement Project/ Field Project absolute grading system shall be followed irrespective of number of students registered in the course.
- c) For each student, evaluation in different components of a course shall be done in absolute marks considering the weightage in the scheme.
- d) The marks of various components shall be added to get total marks secured on a 100-points scale and should be rounded off.
- e) The provisional grades shall be awarded by the Examination Committee. The grades shall be finalized within thirty working days after the End Semester Examination including moderation by Grade moderation committee of respective BoS.
- f) In case of audit courses the students would be awarded grades as follows
 i, 'P' for Pass
 - ii. 'F' for Fail '

The grades shall be awarded by the course coordinators and communicated to the controller of examinations. The course coordinator shall decide and declare the mode of evaluation for the audit courses within the date prescribed by the Dean Academics.



(NEP VERSION: 01)

N-10.3 Standard Relative Grading System

Computation of Standard Relative Grades

If sample size (number of students appearing in a course) is greater than 30 then Relative Grading System is used as per Table N-10.3 given below.

For award of suitable pass grade in a Theory and Practical Courses, student must have to secure atleast 20% of Total ESE marks in that Course.

Average (\vec{X}) and standard deviation (σ) should be calculated as per the following equations.

Average =
$$\overline{X} = \frac{\sum marks}{n}$$

Where, n = Total No. of Examinee - Detained Examinee

Standard deviation =
$$\sigma = \sqrt{\frac{\sum (X - \overline{X})^2}{(n-1)}}$$

Where X = Individual marks of each students.

Table N-10.3: Awards of Grade Using Relative Grading System

	GRADE		
	Marks obtained	≥ Average + 1.5 σ	0
Average + 1.5σ >	Marks obtained	≥ Average + 1.0 σ	A ⁺
Average + 1.0 σ >	Marks obtained	≥ Average + 0.5 σ	A
Average + 0.5 σ >	Marks obtained	≥ Average	B ⁺
Average >	Marks obtained	≥ Average - 0.5 σ	В
Average - 0.5σ >	Marks obtained	≥ Average - 1.0 σ	C
Average - 1.0 σ >	Marks obtained	≥ Average - 1.5 σ	P
	Marks obtained	< Average - 1.5 σ	F

The award of grades for Theory Courses of 100 marks and Practical Courses of 50 marks will be subjected to the following process: However, for Theory Courses of 50 marks appropriate calculations must be carried out.





(NEP VERSION: 01)

A) THEORY SUBJECTS (For UG)

If $(X-1.5 \sigma) > 40$ then grade calculation for B ,C, P & F shall be as given below , while that for O,A+,A & B+ shall be same as per Table N-10.3 .

$$B = > \overline{X} - (\overline{X} - 40)/3$$
,

$$C \ge \overline{X} - (\overline{X} - 40) * 2/3,$$

$$P \ge \bar{X} - (\bar{X} - 40) * 3/3,$$

$$F < \overline{X} - (\overline{X} - 40) * 3/3$$

B) PRACTICAL SUBJECTS (UG):

if $(\bar{X} - 1.5 \sigma) > 25$ then grades calculation for B ,C, P & F shall be as given below, while that for O,A+,A & B+ shall be same as per Table N-10.3

$$B = > \bar{X} - (\bar{X} - 25)/3$$
,

$$C \ge \bar{X} - (\bar{X} - 25) * 2/3$$
,

$$P \ge \overline{X} - (\overline{X} - 25) * 3/3$$
,



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

h

N-10.4 Award of Grade Based on Absolute Marks System

If sample size (number of regular students appearing in a course) is less than or equal to 30 in theory and practical courses then Absolute Grading System is used as per Table N-10.4 (a) & (b). Absolute marks system shall also be followed for Seminar/ Project Courses irrespective of number of students registered in the course.

For the award of grades in a course, all component-wise evaluation is done in marks. The marks of different components viz. Teachers Assessment Examination(TAE), Class Assessment Examination(CAE), End- Semester-Examination (ESE), are reduced to relative weightages of each component as given in Scheme of Examination. A student will be awarded suitable pass grade in that course[Theory and Practical] only if he/she has scored at least 20% of Total ESE Marks of that Course. Marks so obtained would be converted to grades at the end of semester, as per the guidelines given below:

Table. N-10.4 (a) Awards of Grade Using Absolute Method

For Theory

Range of Marks	Grades
Marks equal to or greater than 90 %	0
Marks equal to or greater than 80% but less than 90%	A+
Marks equal to or greater than 70 % but less than 80%	A
Marks equal to or greater than 60 % but less than 70%	B+
Marks equal to or greater than 55% but less than 60%	В
Marks equal to or greater than 50% but less than 55%	C
Marks equal to or greater than 40 % but less than 50%	P
Marks less than 40%	F



(NEP VERSION: 01)

N-10.4 (b) For Practicals/ Seminars/ Project/ Liberal Learning Courses/ Indian Knowledge System/ Ability Enhancement Course of IV Semester B.Tech./ Value Education Courses/ Comm. Engg. Project/ Field Project

Percentage of Marks	Grade Point
Marks equal to or greater than 90 %	0
Marks equal to or greater than 80% but less than 90%	A+
Marks equal to or greater than 75% but less than 80%	A
Marks equal to or greater than 70% but less than 75%	B+
Marks equal to or greater than 65% but less than 70%	В
Marks equal to or greater than 60% but less than 65%	С
Marks equal to or greater than 50% but less than 60%	P
Marks less than 50%	F

N-10.5 Improvement of Grade/CGPA while undertaking a Programme

Student shall be permitted to improve their grade under the following conditions.

- The examination for improvement of grades shall hereafter be termed as 'Improvement Examination'.
- The facility for improvement of grades will be available to the students having CGPA below 6.75.
- The improvement is possible only in theory papers. No improvement is permissible in practicals/lab courses, projects, workshops and assignments.
- 5. The improvement examination shall be conducted along with the Re-Sit Examination.
- The Improvement Examination can be undertaken only for the courses in which a candidate had appeared as a regular student in the end term examination for which the



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.



A

(NEP VERSION: 01)

Re-Sit is being conducted.

- Additional examination fees will be paid by the student for appearing in the examination for improvement in the grade. The fee payable shall be as prescribed by the Finance Committee.
- 8. After the improvement examination result of the course taken for improvement of grade, better of the two grades, that is grade already awarded and the grade secured in the improvement examination will be considered.
- 9. A candidate who has reappeared for the above examinations under the provision of this ordinance and fails to improve his/her grade, his/her performance at such reappearance shall be ignored.
- Student having undertaken Improvement Examination will not be eligible for the award of any medal/merit position.
- 11. The student shall be issued a fresh replacement grade card indicating the new grade with a mark which shall be explained as 'Improved Grade' only if he/she has improved the grades. The old grade card must be submitted to the concerned office before issue of new grade card.
- 12. For calculation of standard relative grade for evaluation of the academic performance of an examinee in a course in improvement examination, the mean, standard deviation and cutoff of grades of that course in the regular examination shall be applicable.

N-10.6 Grade Moderation Committee

- N-10.6.1 The Grade Moderation Committee for different programmes shall be appointed semester wise by the Chairman, Academic Council. This committee shall be responsible for adherence to the guidelines for the award of grades and shall include all the concerned Course Coordinators. The Chairman, Grade Moderation Committee shall be responsible for forwarding the final grades to the COE.
- N-10.6.2 The Grade Moderation Committee for the first and second semester (first year) shall consist of all the Course Coordinators of the courses offered to the first and second semester students in a semester, with the HoD First year as the Chairman.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT
& RESEARCH, NAGPUR.

H

(NEP VERSION: 01)

The Chairman, Grade Moderation Committee shall be responsible for forwarding the final grades to the COE.

N-10.7 Calculation of SGPA and CGPA

Calculation of Semester Grade Point Average (SGPA)

The performance of a student in a semester is indicated by a number called SGPA. The SGPA is the weighted average of the grade points obtained in all the courses registered by the student during the semester.

$$SGPA = \frac{\sum C_i P_i + C_a P_a}{\sum C_i}$$

Where,

C_i = the number of credits for the ith course of a semester for which SGPA is to be calculated.

Pi = Grade points earned in the ith course.

i = 1, 2,....., n represent the number of courses in which a student is registered in the concerned semester.

Ca=1 ; Incentive credit

Pa - Grade point for participating in activities of incentive scheme.

SGPA is rounded up to two decimal places only and SGPA shall not exceed 10.

Calculation of Cumulative Grade Point Average (CGPA)

An up to date assessment of the overall performance of a student from the time of his first registration is obtained by calculating a number called CGPA, which is weighted average of the grade points obtained in all the courses registered by the student since he/she entered the Institution.

$$\text{CGPA} = \frac{\sum C_j P_j + \sum C_{al} P_{al} + I P_G}{\sum C_j}$$

Where,

C_j = the number of credits for the jth course up to the semester for which CGPA is to be calculated.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

M

(NEP VERSION: 01)

P_i = Grade points earned in the jth course.

j = 1,2,....,m represent the number of courses in which a student is registered up to the semester for which the CGPA is to be calculated.

Cal; Incentive credit in semester

 P_{al} =Grade point for participating in incentive activities in the semester IP_{G} =GATE incentive grade points.

CGPA is rounded up to two decimal places only and shall not exceed 10.

Note:

- > As seen from above formula CGPA is not average of SGPA.
- DIVISION /CLASS: As per the prevailing norms of the affiliating University and competent authority.

N-10.8 Grade Card

- N-10.8.1 The grade card shall be issued at the end of the semester to each student and will contain the following:
 - a) The credits for each course registered for that semester.
 - b) The grade points and letter grades obtained in each course.
 - c) The total number of credits earned by the student upto the end of that semester in each of the course.
 - d) The SGPA and the CGPA.
 Refer Regulation N-10.2 N-10.3, N-10.4, N-10.7 and N-10.9 for computation of grades from the marks and conversion to the SGPA & CGPA.
- N-10.8.2 Grade card will not indicate class or division or rank.
- N-10.8.3 Wherever required the conversion of CGPA to percentage of marks prevailing guidelines from the affiliating University and Competent Authority to be followed.



(NEP VERSION: 01)

N-10.9 Indication of Attempt on Grade Card

N-10.9.1 The following Characters will be displayed in the Grade Card to indicate the attempts. The Degree will not have any such indication. The Grade Cards of successive attempts will be separately provided. However a single Grade Card for a semester may be provided after all the subjects of that semester are passed in more than one attempt. But it will be marked 'N' as already said. The student will have to separately apply to the Controller of Examinations for the single semester Grade Card with copies of all the intermediate semester Grade Card along with a fees decided by the Finance Committee.

M - With Re-Sit Examination

N - Not in the First Attempt

IG - Improvement Grade

N-10.10 Minimum Requirements for the Award of the Degree

N-10.10.1

The student should have taken and passed all the prescribed courses including seminar and projects under the general institutional and departmental fequirements.

N-10.10.2

The credits for the courses in which a student has obtained 'P' grade or higher shall be counted as 'credits earned by him/her. The grades awarded for successful and unsuccessful completion of Audit Course shall be 'P' and 'F' respectively. The student should also have 'P' grade in all the audit courses otherwise he/she will have to repeat the audit course provided that a student should have no case of indiscipline pending against him/her.





N-10.11 Award of Degree

N-10.11.1 The Degrees shall be awarded by the Rashtrasant Tukadoji Maharaj
Nagpur University, Nagpur along with the name of College, on
recommendations of the Academic Council/ Board.

N-10.12 Award of Medals / Scholarships

- N-10.12.1 The award of scholarships / freeships and other benefits will be in accordance with rules framed by the Government of Maharashtra and Govt. of India.
- N-10.12.2 Awards available under excellent performances in sports, cultural, extracurricular, debate, etc. shall be given to the students as per Institute policy.
- N-10.12.3 The award of merit scholarships / need base scholarship /medals shall be awarded to the students as per the Institute's policy.
- N-10.12.4 Students clearing all courses offered in a programme in regular examination in first attempt shall be considered for the award of merit / medal as per their order of merit.

In case, a student has cleared any course offered in a programme in Re-Sit examination he / she shall not considered for the award of merit / medal.

11. CODE OF CONDUCT AND DISCIPLINE

- N-11.1 Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity, which will tend to bring down the prestige of the Institute.
- N-11.2 The following acts of omission and/ or commission by the students within or outside the college campus shall constitute gross violation of 'Code of Conduct' punishable as indiscipline.
 - a) Lack of courtesy and decorum, as well as indecent behavior;
 - b) Willful damage of property of Institute/Hostel or of fellow students;
 - c) Possession/ Consumption/ Distribution of alcoholic drink and banned



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

H

(NEP VERSION: 01)

drugs;

- Mutilation or unauthorized possession of library materials like books, journals etc.
- e) Noisy and Unseemly behavior disturbing peace in Institute and Hostel;
- f) Hacking in Computer system, either hardware or software or both;
- g) Any other act considered by the Institute as a gross indiscipline.
- N-11.3 Any act of student's indiscipline will be addressed by Discipline Committee duly constituted and notified by the Principal. The Committee will enquire into the charges of indiscipline and recommend appropriate measures/punitive action to the Principal. The Discipline committee may inform the recommendations to the students. Decision of the Principal would be final.
- N-11.3 Appeal: The student may appeal to the Chairman, Academic Council whose decision will be final. The Principal will report the action taken at the next meeting of the Academic Council.
- N-11.4 If the student while studying in the Institute is found indulging in anti-national activities contrary to the provisions of acts and laws enforced by Government he/ she will be liable to be expelled from the Institute without any notice.
- N-11.5 If a student is involved in any kind of ragging, the student shall be liable for strict action as per Maharashtra anti-ragging act 1999, which is in effect from15th May1999.
- N-11.6 If any statement/ information supplied by the student in connection with his/her admission is found to be false/ incorrect at any time, his/her admission shall be cancelled and he/she shall be expelled from the Institute and fees paid shall be forfeited.
- N-11.7 Student once admitted in the Institute has to follow dress code, if any, as well as other instructions issued by the administration from time to time, failing which disciplinary action shall be initiated against such student.
- N-11.8 If a student is found guilty of overall misconduct during his/her stay in the Institute, he/she will be punished as per the recommendations of the Principal.

 The maximum punishment may be expulsion from the Institute.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

H

12.ACT OF MALPRACTICES/ UNFAIR MEANS

Every student appearing for the End Semester Examination is liable to be charged with committing malpractice(s) / use of unfair means, if he / she is observed as committing any of the following acts:

- a) Misbehavior with officials / using unfair means / creating nuisance / using obscene language / violence / threat at the centre to the person involved in conduct of examination etc or any other kind of rude behavior in or near the Examination Hall.
- b) Writing on the Question Paper/ Admission Card & or passing on any type of written paper to the other student(s) in the examination Hall.
- c) Disclosing his/her identity by writing any words or by making any peculiar marks on the pages other than the facing sheet in the answer scripts.
- d) Possession of electronic gadgets like mobile phones, Programmable calculator, pen-drive or such other storage devices in the Examination Hall.
- e) Communicating with any other student(s) any other person(s) inside or outside the Examination Hall with a view to take assistance or aid to write answers in the examination.
- f) Copying form the material or matter or answer(s) of another student or from similar aid or assistance rendered by another student within the Examination Hall.
- g) Making any request of representation or offer of any threat for inducement or bribery to Jr. Supervisor and / or any other official for favours in the Examination Hall or in the answer script.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

(NEP VERSION: 01)

- Approaching directly or indirectly the teaching staff, officials or examiners or bring about undue pressure or influence or influence upon them for favour in the examination.
- Smuggling out or smuggling in the answer script pages or supplementary sheets or tearing them off and / or inserting pages written outside the examination hall in to the answer scripts.
- Receiving material from outside or inside the Examination Hall for the purpose of copying.
- k) Bringing into the Examination Hall or being found in possession of portions of an unauthorized book, manuscript or such other material or matter in the Examination Hall.
- Copying or taking aid from any material or matter referred to in subclauses (j & k) above to answer in the examination.
- Impersonating or allowing any other person to impersonate to answer in his/her place in the Examination Hall.
- n) Committing any other act or commission or omission intending to gain an advantage or favour in the examination by misleading, deceiving or inducing the examiner or official.
- Having in one's possession any written matter on scribbling pad,
 calculator, palm, hand, leg, any part of body, clothing, socks, instrument
 box, identity Card, Hall Ticket, Scales etc.
- p) Destroying any evidence of malpractice, like, tearing or mutilating the answer script(s) or running away along with the answer script(s) from the examination Hall.
- q) Not withstanding anything contained above, any other activity in which the student has indulged and which in the opinion of the authorities of the Institute constitutes malpractice/ use of Unfair means will be construed as malpractice/ use of Unfair means.

13 EMERGENT CASES



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

ge

H

Notwithstanding anything contained in the above regulations, the Chairman of the Academic Council may, in emergent situations, take action on behalf of the Academic Council as he thinks necessary and shall at the earliest opportunity; report it in the next meeting of the Academic Council.

14 INTERPRETATION OF REGULATIONS

In case of any dispute, difference of opinion in interpretation of these regulations or any other matter not covered in these regulations, the decision of the Chairman, Academic Council shall be final and binding.

15 POWER TO MODIFY

Notwithstanding all that has been stated above, the Governing Body has the right to modify any of the above regulations from time to time.



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

ANNEXURE -I

CURRICULUM SCHEME OF FIRST YEAR ENGINEERING

With effect from Session 2023-24 [NEP-COMPLIANT]

Semester-I (Group-I: CS and ET)

	40		Hou	rs Per	Week		M	8	ESE	
Sr. No.	Course Code	Course Title	L T P	Credits	Continuous Evaluation	End Sem. Exam	Total	Duration (Hrs)		
1	N-BSCI01T	Successive Differentiation and Differential Equation	3	1	0	4	40	60	100	3
2	N-BSC102T	Applied Physics	2	0	0	2	20	30	50	2
3	N-BSC102P	Applied Physics Lab	0	0	2	1	25	25	50	
4	N-ESC103T	Engineering Graphics and Design	1	0	0	I	40	-60	100	4
5	N-ESC103P	Engineering Graphics and Design Lab	0	0	4	2	25	25	50	
6	N-VSC	Vocational Skill Course-1*	0	0	4	2	25	25	50	
7	N-ESC102T	Programming for Problem Solving	3	0	0	3	40	60	100	. 3
8	N-ESC102P	Programming for Problem Solving Lab	0	0	4	2	25	25	50	11.
9	N-IKS101T	Indian Knowledge System	2	0	0	2	50		50	
10	N-CC101	Liberal Learning Course - 1	1	0	2	2	50		50	
		TOTAL	12	1	16	21	340	310	650	

Vocational Skill Course shall be from the major discipline.





CURRICULUM SCHEME OF FIRST YEAR ENGINEERING With effect from Session 2023-24 [NEP-COMPLIANT]

Semester-I (Group-II: CD, CM, EE and ME)

. 1			19.18010				Maxin	num Mari	CS.	ESE		
Sr. No.	Course Code	Course Title						Credits	Continuous	End Sem.	Total	Duration
			L	T	P			Evaluation	Exam		(Hrs)	
1	N-BSC101T	Successive Differentiation and Differential Equation	3	1.	0	4	40	60	100	3		
2	N-BSC103T	Chemistry for Engineering	2	0	0	2	20	30	50	2		
3	N-BSC103P	Engineering Chemistry Lab	0	0	2	1	25	25	50			
4	N-ESCIOIT	Electrical Engineering	2	ī	0	3	40	60	100	3		
5	N-ESC101P	Electrical Engineering Lab	0	0	2	1	25	25	50			
6	N-VSC	Vocational Skill Course-1*	0	0	4	2	25	25	50			
7	N-ESC102T	Programming for Problem Solving	3	0	0	3	40	60	100	3		
8	N-ESC102P	Programming for Problem Solving Lab	0	0	4	2	25	25	50			
9	N-AECI0IT	Communicative English	1	0	0	1	20	30	50	2		
10	N-AEC101P	Communicative English Lab	0	0	2	1	25	25	50	2		
11	N-CC102	Liberal Learning Course - 2	1	0	2	2	50		50			
		TOTAL	12	2	16	22	335	365	700			

^{*} Vocational Skill Course shall be from the major discipline.



CURRICULUM SCHEME OF FIRST YEAR ENGINEERING

With effect from Session 2023-24

[NEP-COMPLIANT]

Semester-II (Group-I: CS and ET)

- 150		Scheme of Teaching & I	xamin	ation	of Ba	chelor o	Technology			
			Hour	s Per \	Week		Max	imum Mark	5	ESE
ir. No.	Course Code	Course Title	1.	т	P	Credits	Continuous Evaluation	End Sem. Exam	Total	Duration (Hrs)
1	N-BSC104T	Integral Calculus and Linear Algebra	3	1	0	4	40	60	100	3
2	N-BSC103T	Chemistry for Engineering	2	0	0	2	20	30	_ 50	2
3	N-BSC103P	Engineering Chemistry Lab	0	0	2	1	25	25	50	
4	N-ESC101T	Electrical Engineering	2	1	0	3	40	60	100	3
5	N-ESC101P	Electrical Engineering Lab	0	0	2	1	25	25	50	
6	N-VSC	Vocational Skill Course-2*	0	0	4	2	25	25	50	
7	N-AECI01T	Communicative English	1	0	0	1	20	30	50	2
8	N-AEC101P	Communicative English Lab	0	0	2	1	25	25	50	14
9	N-PCC	Program Core Course*	2	0	0	2	20	30	50	2
10	N-PCC	Program Core Course* .	0	0	2	1	25	25	50	12
11	N-CC102	Liberal Learning Course - 2	1	0	2	2	50	+	50	
45		TOTAL	11	2	14	20	315	335	650	

Program Core Course and Vocational Skill Course shall be from the major discipline.





CURRICULUM SCHEME OF FIRST YEAR ENGINEERING

With effect from Session 2023-24

[NEP-COMPLIANT]

Semester-II (Group-II: CD, CM, EE and ME)

		1000			1		Mi	arks	ESE	
Sr.	f ourrest t orde	Course Title	Honrs Per Week			Credits	Continuous	End		Duration
No.			L	T	P		Evaluation	Exam	Sem Total	(Hrs)
1	N-BSC104T	Integral Calculus and Linear Algebra	3	1	0	4	40	60	100	3
2	N-BSC102T	Applied Physics	2	0	0	2	20	30	50	2
3	N-BSC102P	Applied Physics Lab	0	0	2	1	25	25	50	*
4	N-ESC103T	Engineering Graphics and Design	1	0	0	1	40	60	100	4
5	N-ESC103P	Engineering Graphics and Design Lab	0	0	4	2	25	25	50	*
6	N-VSC	Vocational Skill Course-2*	0	0	4	2	25	25	50	
7	N-IKS101T	Indian Knowledge System	2	0	0	2	50		50	-
8	N-PCC	Program Core Course*	2	0	0	2	20	30	50	2
9	N-PCC	Program Core Course*	0	0	2	1	25	25	50	
10	N-CC101	Liberal Learning Course - 1	1	0	2	2	50		50	-
		TOTAL	11	1	14	19	320	280	600	

Program Core Course and Vocational Skill Course shall be from the major discipline.



LIST OF PROGRAM CORE COURSE [THEORY]

Sr. No.	Course Code	Course Title
1	N-PCCCD101T/ N-PCCCM101T/ N-PCCCS101T	Advanced C Programming
2	N-PCCEE101T	Electrical Measurement and Instrumentation
3	N-PCCET101T	Basic Electronics Engineering
4	N-PCCME101T	Basics of Mechanical Engineering

LIST OF PROGRAM CORE COURSE [PRACTICAL]

Sr. No.	Course Code	Course Title
1	N-PCCCD101P/ N-PCCCM101P/ N-PCCCS101P	Advanced C Programming Lab
2	N-PCCEE101P	Electrical Measurement and Instrumentation Lab
3	N-PCCET101P	Basic Electronics Engineering Lab
4	N-PCCME101P	Basics of Mechanical Engineering Lab

LIST OF VOCATIONAL SKILL COURSE-1

Sr. No.	Course Code	Course Title	
1	N-VSCCD101P/ N-VSCCM101P/ N-VSCCS101P	Hardware & Networking	
2	N-VSCEE101P	Electrical Workshop Practice-1	
3	N-VSCET101P	Electronic Workshop-1	
4	N-VSCME101P	Workshop Practices	

LIST OF VOCATIONAL SKILL COURSE-2

Sr. No.	Course Code	Course Title
1	N-VSCCD102P/ N-VSCCM102P/ N-VSCCS102P	Web Designing
2	. N-VSCEE102P	Electrical Workshop Practice-2
3	N-VSCET102P	Electronic Workshop-2
4	N-VSCME102P	Computer Aided Drafting





CURRICULUM SCHEME FOR B. TECH. COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE) With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-III

50			1	ours ;			Maximum Marks			ESE
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	1	(Hrs)
1	N-PCCCD301T	Computer Architecture and Organization	3	0	0	3	40	60	100	3
2	N-PCCCD302T	Object Oriented Programming	3	0	0	3	40	60	100	3
3	N-PCCCD302P	Object Oriented Programming Lab	0	0	2	1	25	25	50	
4	N-PCCCD303T	Statistics for Data Science	2	1	0	3	40	60	100	3
5	N-PCCCD304P	Professional Skills Lab	0	0	2	1.	25	25	50	-
6	N-MDM	Multidisciplinary Minor Course-1	3	0	0	3	40	60	100	3
7	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
8	N-HSSMCD301T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
9	N-VECCD301T	Universal Human Values	2	0	0	2	50		50	-
o de	N-CEPCD301	Community Engagement Project (CEP)				1			10000	
10		OR	0	0	4	2	50		50	1.50
	N-FPCD301	Field Project (FP)			J.			45		
11	N-MCCD301	Indian Constitution	2	0	0		50		50	3.50
		TOTAL	20	1	8	23	420	380	800	





(NEP VERSION: 01)

B. TECH. COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

			He	Hours per			Maxin		ESE	
Sr. No.	Course Code	Course Title	The state of the s			Credits	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	200000	(Hrs)
1	N-PCCCD401T	Data Structure and Algorithms	3	0	0	3	40	60	100	3
2	N-PCCCD401P	Data Structure and Algorithms Lab	0	0	2	1	25	25	50	7
3	N-PCCCD402T	Fundamentals of Artificial Intelligence	3	0	0	3	40	60	100	3
4	N-PCCCD403T	Computer Network	3	0	0	3	40	60	100	3
5	N-MDM	Multidisciplinary Minor Course -2	3	0	0	3	40	60	100	.3
6	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-1	0	0	4	2	25	25	50	-
8	N-AEC	Ability Enhancement Course	2	0	0	2	50		50	4
9	N-HSSMCD401T	Entrepreneurship Development	2	0	0	2	20	30	50	2
10	N-VECCD401T	Environmental Studies	2	0	0	2	50	7.	50	-
		TOTAL	21	0	6	24	370	380	750	







B. TECH. COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-V

			Hours per				Maxin	ESE		
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem Total	Duration	
			L	T	P		Evaluation	Exam		(Hrs)
1	N-PCCCD501T	Database Management System	3	0	0	3	40	60	100	3
2	N-PCCCD501P	Database Management System Lab	0	0	2	b	25	25	50	
3	N-PCCCD502T	Machine Learning	3	0	0	3	40	60	100	3
4	N-PCCCD502P	Machine Learning Lab	0	0	2	1	25	25	. 30	
5	N-PCCCD503T	Design Analysis and Algorithms	3	0	0	3	40	60	100	3
6	N-PCCCD503P	Design Analysis and Algorithms Lab	0	0	2	1	25	25	50	
7	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-1 Lab	0	0	2	1	25	25	50	
9	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
10	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
		TOTAL	17	0	8	21	320	430	750	

Program Elective - 1 and Program Elective - 1 Lab

Sr. No	Course Code	Course Title
1	N-PECCD501T	Digital Image Processing
	N-PECCD501P	Digital Image Processing Lab
	N-PECCD502T	Cyber Security
2	N-PECCD502P	Cyber Security Lab
3	N-PECCD503T	Information Retrieval



(NEP VERSION: 01)

N-PECCD503P Information Retrieval Lab

B. TECH. COMPUTER SCIENCE AND **ENGINEERING (DATA SCIENCE)**

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

			Hours per			Maximum Marks			ESE	
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem	Total	Duration
	3 11 11	E WITH STYLE	L	T	P		Evaluation	Exam	HOSPITE.	(Hrs)
1	N-PCCCD601T	Operating System	3	0	0	3	40	60	100	3
2	N-PCCCD601P	Operating System Lab	0	0	2	1	25	25	50	
3	N-PCCCD602T	Theory of Computation	3	0	0	3	40	60	100	3
-4	N-PCCCD603T	Data Science Tools and Techniques	2	0	0	2	20	30	50	2
5	N-PEC	Program Elective-2	3	0	0	3	40	60	100	3
6	N-PEC	Program Elective-2 Lab	0	0	2	1	25	25	50	-
7	N-PEC	Program Elective-3	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-3 Lab	0	0	2	1	25	25	50	
9	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
10	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	-
11	N-SEC	Skill Enhancement Course-3	0	0	2	.,1	25	25	50	
		TOTAL	17	0	10	22	345	455	800	

Program Elective - 2 and Program Elective - 2 Lab

Sr. No	Course Code	Course Title
1	N-PECCD601T	NLP for Indian Languages
1	N-PECCD601P	NLP for Indian Language Lab
	N-PECCD602T	Cryptography
2	N-PECCD602P	Cryptography Lab
3	N-PECCD603T	Big Data Analytics and Business Intelligence

Program Elective - 3 and Program Elective - 3 Lab

Sr. No	Course Code	Course Title
1	N-PECCD604T	Blockchain Technology
	N-PECCD604P	Blockchain Technology Lab
	N-PECCD605T	Applications of IOT and Security
2	N-PECCD605P	Applications of IOT and Security Lab
3	N-PECCD606T	Data Science for NLP





N-PECCD603P Big Data Analytics and Business Intelligence Lab

N-PECCD606P

Data Science for NLP Lab

B. TECH. COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE)

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VII

	Course Code	Course Title	Hours per				Maxin	ks	ESE	
Sr. No.				week		Credits	Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
			L	T	P					
1	N-PCCCD701T	Data Analytics	3	0	0	3	40	60	100	3
2	N-PCCCD702T	Deep Learning	3	0	0	3	40	60	100	3
3	N-PCCCD702P	Deep Learning Lab	0	0	2	1	25	25	50	
4	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective-4 Lab	0	0	2	1	25	25	50	-
6	N-PEC	Program Elective-5	3	0	0	3	40	60	100	-3
7	N-PEC	Program Elective-5 Lab	0	0	2	1	25	25	50	-
8	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	2
9	N-PROJCD701	Project-I	0	0	8	4	75	75	150	*
	37 3 7 7	TOTAL	14	0	14	21	330	420	750	- 1

Program Elective - 4 and Program Elective - 4 Lab

Sr. No.	Course Code	Course Title
	N-PECCD701T	GPU Computing
1	N-PECCD701P	GPU Computing Lab
99	N-PECCD702T	Bitcoins and Cryptocurrencies
2	N-PECCD702P	Bitcoins and Cryptocurrencies Lab
3	N-PECCD703T	Data Science for Healthcare

Program Elective - 5 and Program Elective - 5 Lab

Sr. No.	Course Code	Course Title			
	N-PECCD704T	CNN for Visual Recognition			
1	N-PECCD704P	CNN for Visual Recognition Lab			
20	N-PECCD705T	Digital Forensic			
2	N-PECCD705P	Digital Forensic Lab			
3	N-PECCD706T	Dockers and Kubernets			



(NEP VERSION: 01)

N-PECCD703P Data Science for Healthcare Lab

N-PECCD706P

Dockers and Kubernets Lab

CURRICULUM SCHEME FOR B. TECH. COMPUTER SCIENCE AND ENGINEERING (DATA SCIENCE) With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

			Hours per				Maxin	ks	ESE	
Sr. No.	Course Code	Course Title		weel		Credits	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam		(Hrs)
1	N-RMCD801T	Research Methodology	3	0	0	3	40	60	001	3
2	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
3	N-PROJCD801	Project-II	0	0	12	6	100	100	200	
		TOTAL	6	0	12	12	180	220	400	
				OR						
1	N-ELCCD801	Internship/On Job Training (OJT)	One Sem		ester	12	100	100	200	2

Program Elective - 6

Sr. No.	Course Code	Course Title					
1	N-PECCD801T	Time Series Analysis					
2	N-PECCD802T	Data and Internet Security					
3	N-PECCD803T	Computation Neuroscience					







CURRICULUM SCHEME FOR B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING) With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-III

		amination of Bachelor of Techn	Hours per				Maxi	mum Mark		ESE	
Sr.	Course Code	Course Title	week		Credits	Continuous	End		Duration		
No.	No.	Course Cours		L	T	P	E TO COMMON	Evaluation	Sem Exam	Total	(Hrs)
1	N-PCCCM301T	Computer Architecture and Organization	3	0	0	3	40	60	100	3	
2	N-PCCCM302T	Object Oriented Programming	3	0	0	3	40	60	100	3	
3	N-PCCCM302P	Object Oriented Programming Lab	0	0	2	1	25	25	50	*	
4	N-PCCCM303T	Mathematics for Machine Learning	2	1	0	3	40	60	100	3	
5	N-PCCCM304P	Professional Skills Lab	0	0	2	1	25	25	50	-	
6	N-MDM	Multidisciplinary Minor Course -1	3	0	0	3	40	60	100	3	
7	N-OEC	Open Elective Course-1	. 3	0	0	3	40	60	100	3	
8	N-HSSMCM301T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2	
9	N-VECCM301T	Universal Human Values	2	0	0	2	50		50		
10	N-CEPCM301	Community Engagement Project (CEP)	0	0	4	2	50		50		
10		OR		0	.4	- 4	30	-	20		
	N-FPCM301	Field Project (FP)									
11	N-MCCM301	Indian Constitution	2	0	0		50		50		
		TOTAL	20	1	8	23	420	380	800		



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

H

B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

			H	urs p		13	Maximum Marks			ESE
Sr. No.	Course Code	Course Title	111111111111111111111111111111111111111	week		Credits	Continuous	End Sem	Total	Duration
			t.	т	P		Evaluation	Exam		(Hrs)
1	N-PCCCM401T	Data Structure and Algorithms	3	0	0	3	40	60	100	3
2	N-PCCCM401P	Data Structure and Algorithms Lab	0	0	2	1	25	25	50	
3	N-PCCCM402T	Fundamentals of Artificial Intelligence	3	0	0	3	40	60	100	3
4	N-PCCCM403T	Computer Network	3	0	0	3	40	60	100	3
5	N-MDM	Multidisciplinary Minor Course -2	3	0	0	3	40	60	100	3
6	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-1	0	0	4	2	25	25	50	
8	N-AEC	Ability Enhancement Course	2	0	0	2	50		50	
9	N-HSSMCM401T	Entrepreneurship Development	2	0	0	2	20	30	50	2
10	N-VECCM401T	Environmental Studies	2	0	0	2	50	2	50	-
		TOTAL	21	0	6	24	370	380	750	





B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR SEMESTER-V

Sr. No.	Course Code	Course Title	Hours per week				Maximu	3	ESE	
						Credit	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exa	50317	(Hrs)
12	N-PCCCM501T	Database Management System	3	0	0	3	40	60	100	3
2	N-PCCCM501P	Database Management System Lab	0	0	2	1	25	25	50	- 1
3	N-PCCCM502T	Machine Learning	3	0	0	3	40	60	100	3
4	N-PCCCM502P	Machine Learning Lab	0	0	2	1	25	25	50	
5	N-PCCCM503T	Operating System	3	0	0	3	40	60	100	3
6	N-PCCCM503P	Operating System Lab	0	0	2	1	25	25	50	
7	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-1 Lab	0	0	2	1	25	25	50	
9	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
10	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
		TOTAL	17	0	8	21	320	430	750	

Program Elective - 1 and Program Elective - 1 Lab

Sr. No	Course Code	Course Title
1	N-PECCM501T	IoT & Machine Learning
,	N-PECCM501P	IoT & Machine Learning Lab
2011	N-PECCM502T	Digital Image & Video Processing
2	N-PECCM502P	Digital Image & Video Processing Lab
	N-PECCM503T	Data Mining & Predictive Modeling
3	N-PECCM503P	Data Mining & Predictive Modeling Lab





B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

	Course Code		Hours per				Maxin	ESE		
Sr. No.		Course Title		week			Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	32/17/20	(Hrs)
1	N-PCCCM601T	Theory of Computation	3	0	0	3	40	60	100	3
2	N-PCCCM602T	Design Analysis and Algorithms	3	0	0	3	40	60	100	3
3	N-PCCCM603T	Soft Computing	3	0	0	3	40	60	100	3
4	N-PEC	Program Elective-2	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective-2 Lab	0	0	2	1	25	25	50	
6	N-PEC	Program Elective-3	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-3 Lab	0	0	2	1	25	25	50	
8	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
9	N-SEC	Skill Enhancement Course-2	0	0	2	-1	25	25	50	
10	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	
		TOTAL	18	0	8	22	340	460	800	*

Program Elective - 2 and Program Elective - 2 Lab

Sr. No	Course Code	Course Title				
1	N-PECCM601T	GPU Computing				
1	N-PECCM601P	GPU Computing Lab				
	N-PECCM602T	Computer Vision				
2	N-PECCM602P	Computer Vision Lab				
3	N-PECCM603T	Optimization Techniques in Machine Learning				

Program Elective - 3 and Program Elective - 3 Lab

Sr. No	Course Code	Course Title				
1	N-PECCM604T	AI in Gaming				
*	N-PECCM604P	AI in Gaming Lab				
	N-PECCM605T	Pattern Recognition				
2	N-PECCM605P	Pattern Recognition Lab				
3	N-PECCM606T	Cloud Computing				





(NEP VERSION: 01)

N-PECCM603P Optimization Techniques in Machine Learning Lab

N-PECCM606P

Cloud Computing Lab

B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VII

			Hours per				Maxi	ESE		
Sr. No.	Course Code	Course Title		week			Continuous	End Sem	Total	Duration
		TO SECURE TO LANCE	L	T	P		Evaluation	Exam		(Hrs)
1	N-PCCCM701T	Software Engineering and Project Management	3	0	0	3	40	60	100	3
2	N-PCCCM702T	Deep Learning	3	0	0	3	40	60	100	3
3	N-PCCCM702P	Deep Learning Lab	0	0	2	-1	25	25	- 50	
4	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective-4 Lab	0	0	2	.1	25	25	50	
6	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-5 Lab	0	0	2	1	25	25	50	-
8	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	2
9	N-PROJCM701	Project-I	0	0	8	4	75	75	150	
		TOTAL	14	0	14	21	330	420	750	

Program Elective - 4 and Program Elective - 4 Lab

Sr. No.	Course Code	Course Title
	N-PECCM701T	NLP for Indian Languages
1	N-PECCM701P	NLP for Indian Languages Lab
137	N-PECCM702T	Text Processing
2	N-PECCM702P	Text Processing Lab
	N-PECCM703T	Information Security
3	N-PECCM703P	Information Security Lab

Program Elective - 5 and Program Elective - 5 Lab

Sr. No.	Course Code	Course Title
	N-PECCM704T	AI in Healthcare
1	N-PECCM704P	AI in Healthcare Lab
	N-PECCM705T	CNN for Visual Recognition
2	N-PECCM705P	CNN for Visual Recognition Lab
	N-PECCM706T	Time Series Analysis
3	N-PECCM706P	Time Series Analysis Lab



(NEP VERSION: 01)

B. TECH. COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

			н	ours p	er	2160	Maxir	num Mari	cs.	ESE
Sr. No.	Course Code	Code Course Title week Credits Continuous	End Sem	Total	Duration					
	44.47		L	T	P		Evaluation	Exam	15	(Hrs)
1	N-RMCM801T	Research Methodology	3	0	0	3	40	60	100	3
2	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
3	N-PROJCM801	Project-II	0	0	12	6	100	100	200	-
		TOTAL	6	0	12	12	180	220	400	
	market V			OR						
1	N-ELCCM801	Internship/On Job Training (OJT)	One	Seme	ster	12	100	100	200	-

Program Elective -6

Sr. No.		Course Title			
1	N-PECCM801T	Al for Robotics			
2	N-PECCM802T	Information Retrieval			
3	N-PECCM803T	Reinforcement Learning			



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.



4

(NEP VERSION: 01)

CURRICULUM SCHEME FOR B.TECH. COMPUTER SCIENCE AND **ENGINEERING**

With Effect from Session 2024-2025 (NEP COMPLIANT)

2nd YEAR

SEMESTER-III

	Scheme of Teach	hing & Examination of Bachelor of Tec	hmok	gy 11	I Sen	ester B.Tr	ch. (Computer	Science and	i Enginee	ring)
			Hours per				Maxi	ESE		
Sr. No.	Course Code	Course Title		week	E-3,44000	Credits	Continuous	COSTA DISTRICTOR	Total	Duration
			L	T	P		Evaluation	Exam		(Hrs.)
1	N-PCCCS301T	Object Oriented Programming	3	0	0	3	40	60	100	3
2	N-PCCCS301P	Object Oriented Programming Lab	0	0	2	1	25	25	50	-
3	N-PCCCS302T	Data Structure and Algorithms	3	0	0	3	40	60	100	3
4	N-PCCCS302P	Data Structure and Algorithms Lab	0	0	2	1	25	25	50	-
5	N-PCCCS303T	Discrete Mathematics and Graph Theory	2	1	0	3	40	60	100	3
6	N-PCCCS304P	System Lab	0	0	2	1	25	25	50	
7	N-MDM	Multidisciplinary Minor Course -1	3	0	0	3	40	60	100	3
8	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
9	N-HSSMCS301T	Entrepreneurship Development	2	0	0	2	20	30	50	2
10	N-VECCS301T	Environmental Studies	2	0	0	2	50		50	
	N-CEPCS301	Community Engagement Project (CEP)					-			
11		OR	0	0	4	2	50		50	
	N-FPCS301	Field Project (FP)						71		
		Total	18	1	10	24	395	405	800	



(NEP VERSION: 01)

B.TECH. COMPUTER SCIENCE AND ENGINEERING

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

Ġ.			Hours per week Credits				Maxim	ESE		
Sr. No.	Course Code	Course Title				Credits	Continuous	End Sem	Total	Duration
111		Total Profession	L	T	P		Evaluation	Exam		(Hrs.)
1	N-PCCCS401T	Computer Architecture and Organization	3	0	0	3	40	60	100	3
2	N-PCCCS402T	Operating System	3	0	0	3	40	60	100	3
3	N-PCCCS402P	Operating System Lab	0	0	2	1	25	25	50	1.5
4	N-PCCCS403T	Computational Mathematics	2	1	0	3	40	60	100	3
5	N-MDM	Multidisciplinary Minor Course-2	3	0	0	3	40	60	100	3
6	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-1	0	0	4	2	25	25	50	
8	N-AEC	Ability Enhancement Course	2	0	0	2	50		50	- 14
9	N-HSSMCS401T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
10	N-VECCS401T	Universal Human Values '	2	0	0	2	50	*	50	19
11	N-MCCS401	Indian Constitution	2	0	0	-	50		50	14
	PC.	TOTAL	22	1.	6	24	420	380	800	15







(NEP VERSION: 01)

B.TECH. COMPUTER SCIENCE AND ENGINEERING

With Effect from Session 2025-2026 (NEP COMPLIANT)

3rd YEAR

SEMESTER-V

	Scheme of Teach	hing & Examination of Bachelor of Tech	nology	V Sen	nester	B.Tech. (C	omputer Scienc	e and En	giaceria	rg)
			Hours per week			Credits	Maximo	ESE		
Sr. No.	Course Code	Course Title					Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	160670	(Hrs.)
1	N-PCCCS501T	Artificial Intelligence	3	0	0	3	40	60	100	3
2	N-PCCCS501P	Artificial Intelligence Lab	0	0	2	1.	25	25	50	
3	N-PCCCS502T	Computer Networks	3	0	0	3	40	60	100	3
4	N-PCCCS502P	Computer Networks Lab	0	0	2	1	25	25	50	-
5	N-PCCCS503T	Design Analysis of Algorithm	3	0	0	3	40	60	100	3
6	N-PCCCS503P	Design Analysis of Algorithm Lab	0	0	2	1	25	25	50	
7	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-1 Lab	0	0	2	1	25	25	50	
9	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
10	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
		TOTAL	17	0	8	21	320	430	750	

Program Elective - 1 and Program Elective - 1 Lab'

Sr. No	Course Code	Course Title
	N-PECCS501T	Cryptography & Network Security
	N-PECCS501P	Cryptography & Network Security Lab
	N-PECCS502T	Data Warehousing and Mining
2	N-PECCS502P	Data Warehousing and Mining Lab
3	N-PECCS503T	Cloud Computing
0	N-PECCS503P	Cloud Computing Lab



(NEP VERSION: 01)

B.TECH. COMPUTER SCIENCE AND ENGINEERING

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

						Maxin	ESE			
Sr. No.	Course Code	Course Title		Hours per week			Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam		(Hrs.)
1	N-PCCCS601T	Database Management System	3	0	0	3	40	60	100	3
2	N-PCCCS601P	Database Management System Lab	0	0	2	1	25	25	50	
3	N-PCCCS602T	Theory of Computation	3	1	0	4	40	60	100	3
4	N-PEC	Program Elective-2	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective-2 Lab	0	0	2	-1	25	25	50	*
6	N-PEC	Program Elective-3	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-3 Lab	0	0	2	-1	25	25	50	
8	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
9	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	-
10	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	
		TOTAL	15	1	10	21	325	425	750	- #

Program Elective - 2 and Program Elective - 2 Lab

Sr. No.	Course Code	Course Title
200	N-PECCS601T	Security in Internet of Things
1	N-PECCS601P	Security in Internet of Things Lab
	N-PECCS602T	Machine Learning
2	N-PECCS602P	Machine Learning Lab
3	N-PECCS603T	Design Patterns
-	N-PECCS603P	Design Patterns Lab

Program Elective - 3 and Program Elective - 3 Lab

Sr. No.	Course Code	Course Title
	N-PECCS604T	Cyber Security and Ethical Hacking
+	N-PECCS604P	Cyber Security and Ethical Hacking Lab
	N-PECCS605T	Big-Data Analysis
*	N-PECCS605P	Big-Data Analysis Lab
3	N-PECCS606T	GPU Computing
3	N-PECCS606P	GPU Computing Lab





(NEP VERSION: 01)

B.TECH. COMPUTER SCIENCE AND ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VII

	100 70 100		Hours per week Credits			Maxis	ESE			
Sr. No.	Course Code	Course Title				Credits	Communicas Iran	Contractor Contractor (Contractor)	Total	Duration
	He ly M	Sent to the sent to	L,	T	P		Evaluation	Exam		(Hrs.)
1	N-PCCCS701T	Software Engineering and Quality Assurance	2	0	0	2	20	30	50	2
2	N-PCCCS701P	Software Engineering and Quality Assurance Lab	0	0	2	1	25	25	50	100
3	N-PCCCS702T	Compiler Design	3	0	0	3	40	60	100	-3
4	N-PCCCS702P	Compiler Design Lab	0	0	2	1	25	25	50	(A)
5	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
6	N-PEC	Program Elective-4 Lab	.0	0	2	1	25	25	50	
7	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
8	N-PEC	Program Elective-5 Lab	0	0	2	1	25	25	50	
9	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	2
10	N-PROJCS701	Project-I	0	0	8	4	75	75	150	* 2
Т		TOTAL	13	0	16	21	335	415	750	

Program Elective - 4 and Program Elective - 4 Lah

Sr. No.	Course Code	Course Title
1	N-PECCS701T	Web Security
	N-PECCS701P	Web Security Lab
2	N-PECCS702T	Deep Learning
*	N-PECCS702P	Deep Learning Lab
	N-PECCS703T	Embedded Systems
3	N-PECCS703P	Embedded Systems Lab

Program Elective - 5 and Program Elective - 5 Lab

Sr. No.	Course Code	Course Title
	N-PECCS704T	Blockchain Technology
1	N-PECCS704P	Blockchain Technology Lab
	N-PECCS705T	Natural Language Processing
4	N-PECCS705P	Natural Language Processing Lab
	N-PECCS706T	Distributed Operating Systems
3	N-PECCS706P	Distributed Operating Systems Lab





(NEP VERSION: 01)

B.TECH. COMPUTER SCIENCE AND ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

81		HER LINES, M. HOUSE	Hours per				Maxim	ESE		
Sr. No.	Course Code	Course Title		week	5-000	Credits	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	10,000	(Hrs.)
1	N-PEC	Program Elective-6	3	0	. 0	3	40	60	100	3
2	N-RMCS801T	Research Methodology	3	0	0	3	40	60	100	3
3	N-PROJCS801	Project-II	0	0	12	6	100	100	200	+
		TOTAL	6	0	12	12	180	220	400	*
			0	R						
1	N-ELCCS801	Internship/On Job Training (OJT)	One Semester		12	100	100	200		

Program Elective -6

Sr. No.	Course Code	Course Title
1	N-PECCS801T	Privacy and Security in Online Social Media
2	N-PECCS802T	Computer Vision
3	N-PECCS803T	Social Network Analysis







(NEP VERSION: 01)

CURRICULUM SCHEME FOR B.TECH. ELECTRICAL ENGINEERING With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-III

-214	- Addison Addison and addison	g & Examination of Barbelo	100	ers p	_			um Mark	-	ESE
Sr. No.	Course Code	Course Title	1000	week		Credits	Continuous	End Sem	Total	Duration
.401			L	Т	P.	160	Evaluation	Exam	1 OSM	(Hrs)
1	N-PCCEE301T	Mathematics for Electrical Engineering	2	1	0	3	40	60	100	3
2	N-PCCEE302T	Linear Electric Circuits	3	1	0	4	40	60	100	3
3	N-PCCEE302P	Linear Electric Circuits Lab	0	0	2	1	25	25	50	100
4	N-PCCEE303T	Analog Electronics	3	0	0	3	40	60	100	3
5	N-PCCEE303P	Analog Electronics Lab	0	0	2	+1	25	25	50	100
6	N-MDM	Multidisciplinary Minor Course -1	3	0	0	13	40	60	100	3
7	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
8	N-HSSMEE301T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
9	N-VECEE301T	Universal Human Values	2	0	0	2	50		50	•
10	N-CEPEE301	Community Engagement Project (CEP)	0	0	4	2	50		50	
		OR			2	27			250	117
	N-FPEE301	Field Project (FP)								
11	N-MCEE301	Indian Constitution	2	0	0		50	-	50	*
		TOTAL	20	2	8	24	420	380	800	



ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

B.TECH. ELECTRICAL ENGINEERING

With Effect from Session 2024-2025 (NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

	Scheme of Teachin	g & Examination of Bachelo	rolT	echn	ology	IV Semes	ter B.Tech. (El	ectrical E.	ngincerin	g)
J. Carl	- 1		He	ars p	ner :		Maxim	um Mark	8	ESE
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem	Total	Duration
		*	L	T	P		Evaluation	Exam		(Hrs)
1	N-PCCEE401T	Electrical Machines - I	2	1	0	3	40	60	100	3
2	N-PCCEE401P	Electrical Machines – I Lab	0	0	2	1	25	25	50	*
3	N-PCCEE402T	Digital Electronics & Microprocessor	3	0	0	3	40	60	100	3
4	N-PCCEE402P	Digital Electronics & Microprocessor Lab	0	0	2	1	25	25	50	
5	N-PCCEE403T	Elements of Electromagnetics	3	1	0	4	40	60	100	3
6	N-MDM	Multidisciplinary Minor Course -2	3	0	0	3	40	60	100	3
7	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
8	N-SEC	Skill Enhancement Course-1	0	0	2	1	25	25	50	
9	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	
10	N-AEC	Ability Enhancement Course	2	0	0	2	50	*	50 .	4
11	N-HSSMEE401T	Entrepreneurship Development	2	0	0	. 2	20	30	50	2
12	N-VECEE401T	Environmental Studies	2	0	0	2	50	*	50	
-		TOTAL	20	2	8	26	420	430	850	





ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

B.TECH. ELECTRICAL ENGINEERING

With Effect from Session 2025-2026 (NEP COMPLIANT)

3rd YEAR

SEMESTER-V

			He	Hours per			Maximum Marks				
Sr. No.	Course Code	rse Code Course Title		week		Credits	Continuous	End	1	Duration	
140.			L	T	P		Evaluation	Sem Exam	Total	(Hrs)	
1	N-PCCEE501T	Electrical Power System - I	2	1	0	3	40	60	100	3	
2	N-PCCEE502T	Power Electronics	2	1	0	3	40	60	100	3	
3	N-PCCEE502P	Power Electronics Lab	0	0	2	1	25	25	50		
4	N-PCCEE503T	Electrical Machines - II	2	0	0	2	20	30	50	2	
5	N-PCCEE503P	Electrical Machines – II Lab	0	0	2	1	25	25	50		
6	N-PCCEE504P	Electrical Drawing & Simulation Lab	0	0	2	1	25	25	50	-	
7.	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3	
8	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3	
9	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2	
		TOTAL	14	2	6	19	275	375	650		

Program Elective -I

Sr. No.	Course Code	Course Title
1	N-PECEE501T	Utilization of Electrical Energy
2	N-PECEE502T	Industrial Instrumentation and Automation
3	N-PECEE503T	Electric Drives





(NEP VERSION: 01)

B.TECH. ELECTRICAL ENGINEERING

With Effect from Session 2025-2026 (NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

		The state of the s	He	mrs p	er	11111	Maximum Marks			ESE
Sr. No.	Course Code	Course Title	1000000	week		Credits	Continuous	End	*****	Duration
2401			L	T	P		Evaluation	Sem Exam	Total	(Hrs)
1	N-PCCEE601T	Electrical Power System-II	2	1	0	3	40	60	100	3
2	N-PCCEE602T	Control System	3	1	0	4	40	60	100	3
3	N-PCCEE602P	Control System Lab	0	0	2	1	25	25	50	
4	N-PEC	Program Elective-2	3	1	0	4	40	60	100	3
5	N-PEC	Program Elective-3	3:	I	0	4	40	60	100	3
6	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	1.00
8	N-SEC	Skill Enhancement Course-4	0	0	2	1	25	25	50	
		TOTAL	14	4	6	21	275	375	650	

Program Elective - 2

Sr. No.	Course Code	Course Title
1	N-PECEE601T	Non Conventional Energy Sources
2	N-PECEE602T	PLC & SCADA
3	N-PECEE603T	Motors and Motor Control Circuits

Program Elective - 3

Sr. No	Course Code	Course Title
1	N-PECEE604T	Solar Energy & Electrical System Design
2	N-PECEE605T	Advanced Industrial Automation
3	N-PECEE606T	Advanced Electric Drives





(NEP VERSION: 01)

B.TECH. ELECTRICAL ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VII

			He	urs p	ser	11990	Maxim	um Mark	3	ESE
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem	Total	Duration
			L	T	P		Evaluation	Exam	Total	(Hrs)
1	N-PCCEE701T	High Voltage Engineering	3	0	0	3	40	60	100	3
2	N-PCCEE701P	High Voltage Engineering Lab	0	0	2	1	25	25	50	-
3	N-PCCEE702T	Switchgear and Protection	3	0	0	3	40	60	100	3
4	N-PCCEE702P	Switchgear and Protection Lab	0	0	2	-1	25	25	50	*
5	N-PCCEE703P	Computer Applications in Power Systems Lab	0	0	2	1	25	25	50	- 52
6	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	116
9	N-PROJEE701	Project-I	0	0	8	4	75	75	150	10
		TOTAL	14	0	14	21	330	420	750	

Program Elective - 4

Sr. No	Course Code	Course Title
1	N-PECEE701T	Electrical Installation Design
2	N-PECEE702T	Mechatronics
3	N-PECEE703T	Power Quality & FACTS

Program Elective -5

Sr. No	Course Code	Course Title
1	N-PECEE704T	EHV Substation Design & Erection
2	N-PECEE705T	Digital Signal Processing
3	N-PECEE706T	Power System Dynamics and Control



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.

4

(NEP VERSION: 01)

B.TECH. ELECTRICAL ENGINEERING

With Effect from Session 2026-2027 (NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

			H	ours	per	1	Maxim	um Mark		ESE
Sr. No.	Course Code	Course Title	1000	week	K 1, 1, 1	Credits	Continuous	End	***	Duration
140.	3333333333		L	T	P		Evaluation	Sem Exam	Total	(Hes)
1	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
2	N-RMEE801T	Research Methodology	3	0	0	3	40	60	100	3
3	N-PROJEE801	Project-II	0	0	12	6	100	100	200	14
100000		TOTAL	6	0	12	12	180	220	400	
				OR						
1.	N-ELCEE801	Internship/On Job Training (OJT)	Se	One		12	100	100	200	100

Program Elective -6

Sr. No	Course Code	Course Title
1	N-PECEE801T	HVDC Transmission System
2	N-PECEE802T	Fuzzy Logic and Neural Networks
3	N-PECEE803T	Introduction to Smart Grid







(NEP VERSION: 01)

CURRICULUM SCHEME FOR B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-III

	Course Code		He	urs p	er		Maxim	um Marks		ESE
Sr. No.		Course Title	week			Credits	Continuous	End Sem.	Total	Duration
277			L	T	P		Evaluation	Exam		(Hn)
1	N-PCCET301T	Electronic Devices & Circuits	3	1	0	4.	40	60	100	3
2	N-PCCET301P	Electronic Devices & Circuits Lab	0	0	2	1	25	25	50	2
3	N-PCCET302T	Network Theory	3	1	0	4	40	60	100	3
4.	N-PCCET303T	Transform Techniques and Probability	2	1	0	3	40	60	100	3
5	N-MDM	Multidisciplinary Minor Course-1	3	0	0	3	40	60	100	3
6	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
7	N-HSSMET301T	Entrepreneurship Development	2	0	0	2	20	30	50	2
8	N-VECET301T	Environmental Studies	2	0	0	2	50		50	
	N-CEPET301	Community Engagement Project (CEP)				2				. 1
9	3	OR	0	0	4	2	50		50	
	N-FPET301	Field Project (FP)								1%
W.	TO	TAL	18	3	6	24	345	355	700	



(NEP VERSION: 01)

B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

			He	urs p	er		Maxim	um Mark		ESE
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem.	Total	Duration
			L	T	P		Evaluation	Exam	-	(Hrs)
1	N-PCCET401T	Engineering Electromagnetics	2	0	0	. 2	20	30	50	2
2	N-PCCET402T	Digital Electronics and Fundamentals of Microprocessor	3	0	0	3	40	60	100	3
3	N-PCCET402P	Digital Electronics and Fundamentals of Microprocessor Lab	0	0	2	1	25	25	50	
4	N-PCCET403T	Signal Processing	3	0	0	3	40	60	100	3
5	N-PCCET403P	Signal Processing Lab	0	0	2	1	25	25	50	-
6	N-MDM	Multidisciplinary Minor Course-2	3	0	0	- 3	40	60	100	3
7	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
8	N-SEC	Skill Enhancement Course-1	0	0	4	2	25	25	50	-
9	N-AEC	Ability Enhancement Course	2	0	0	2	50		50	1.0
10	N-HSSMET401T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
11	N-VECET401T	Universal Human Values	2	0	0	2	50	*	50	- 4
12	N-MCET401	Indian Constitution	2	0	0		50		50	
	TO	DTAL	22	0	8	24	425	375	800	100





ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-V

			Hours per week				Maxin	ESE		
Sr. No.	Course Code	Course Title	Hou	rs per	week	Credits	Continuous	End Sem.	Total	Duration
COCCE .	LS STEEL YOU		L	T	P		Evaluation	Exam	2000	(Hrs)
1.	N-PCCET501T	Microcontroller	3	1	0	4	40	60	100	3
2	N-PCCET501P	Microcontroller Lab	0	0	4	2	25	25	50	*
3	N-PCCET502T	Communication Electronics	3	1	0	4	40	60	100	3 -
4	N-PCCET502P	Communication Electronics Lab	0	0	2	1	25	25	50	*
5	N-PEC	Program Elective-1	3	0	0	3.	40	60	100	3
6	N-PEC	Program Elective-1 Lab	0	0	2	E	25	25	50	*
7	N-MDM	Multidisciplinary Minor Course-3	3	0	0	3	40	60	100	3
8	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
	TO	DTAL	14	2	8	20	255	345	600	

Program Elective-1 and Program Elective-1 Lab

Sr. No.	Course Code	Course Title
	N-PECET501T	CMOS-VLSI
1	N-PECET501P	CMOS-VLSI Lab
	N-PECET502T	Digital Image Processing
2	N-PECET502P	Digital Image Processing Lab
	N-PECET503T	Peripheral Interface Controller
3	N-PECET503P	Peripheral Interface Controller Lab





(NEP VERSION: 01)

B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

	1		Hours per week			Credits	Maxim	ESE		
Sr. No.	Course Code	Course Title					Continuous	End Sem.		Duration
	44-	(0.1)	L	T	P		Evaluation	Exam	Total	(Hrs)
1	N-PCCET601T	Control System Engineering	3	1	0	4	40	60	100	3
2	N-PCCET601P	Control System Engineering Lab	0	0	2	1	25	25	50	
3	N-PCCET602T	Computer Communication Networks	3	0	0	3	40	60	100	3
4	N-PCCET602P	Computer Communication Networks Lab	0	0	2	1	25	25	50	
5	N-PEC	Program Elective-2	3	0	0	3	40	60	100	3
6	N-PEC	Program Elective-2 Lab	0	0	2	1	25	25	50	-
7	N-PEC	Program Elective-3	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course-4	3	0	0	3	40	60	100	3
9	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	
10	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	*
	7	OTAL	15	1	10	21	325	425	750	100

Program Elective-2 and Program Elective-2 Lab

Sr. No.	Course Code	Course Title
	N-PECET601T	VLSI Signal Processing
1	N-PECET601P	VLSI Signal Processing Lab
2	N-PECET602T	Data Science
2	N-PECET602P	Data Science Lab
	N-PECET603T	Embedded Systems & RTOS
3	N-PECET603P	Embedded Systems & RTOS Lab

Program Elective-3

Sr. No.	Course Code	Course Title				
1	N-PECET604T	Electronic System Design				
2	N-PECET605T	Computer Architecture				
3	N-PECET606T	Antenna Theory and Design				







ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR SEMESTER-VII

		and the same of the same	227	25-777-1915-1925			Maxin	ESE		
Sr. No.	Course Code	Course Title	Hours per week			Credits	Continuous	End Sem.	Total	Duration
			L	T	P		Evaluation	Exam	Total	(Hrs)
1	N-PCCET701T	Digital System Design	4	0	0	4	40	60	100	3
2	N-PCCET701P	Digital System Design Lab	0	0	2	1	25	25	50	
3	N-PCCET702T	Wireless Sensor Networks and IoT	3	1	0	4	40	60	100	3
4	N-PCCET702P	Wireless Sensor Networks and IoT Lab	0	0	2	1	25	25	50	1760
5	N-PEC	Program Elective-4	2	0	0	2	20	30	50	2
6	N-PEC	Program Elective-4 Lab	0	0	2	- 1	25	25	50	
7	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course-5	2	0	0	2	20	30	50	2
9	N-PROJET701	Project-I	0	0	8	4	75	75	150	
		TOTAL	14	1	14	22	310	390	700	

Program Elective-4 and Program Elective-4 Lab

Sr. No.	Course Code	Course Title
	N-PECET701T	VLSI Testing
	N-PECET701P	VLSI Testing Lab
-	N-PECET702T	Neural Networks
2	N-PECET702P	Neural Networks Lab
	N-PECET703T	Robotics
3	N-PECET703P	Robotics Lab

Program Elective-5

Sr. No.	Course Code	Course Title						
1	N-PECET704T	Optical Communication						
2	N-PECET705T	Satellite Communication						
3	N-PECET706T	Mobile Communication						





(NEP VERSION: 01)

B.TECH. ELECTRONICS AND TELECOMMUNICATION ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

			Hours per			100	Maxin	ESE		
Sr. No.	Course Code	Course Title	town off.				Continuous	End		Duration
1407			L	T	P		Evaluation	Sem. Exam	Total	(Hrs)
1	N-RMET801T	Research Methodology	3	0	0	3	40	60	100	3
2	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
3	N-PROJET801	Project-II	0	0	12	6	100	100	200	
		TOTAL	6	0	12	12	180	220	400	
			0	IR.						
1	N-ELCET801	Internship / On Job Training (OJT)	One	Sem	ester	12	100	100	200	

Program Elective-6

Sr. No.	Course Code	Course Title			
1	N-PECET801T	Micro-Electro Mechanical System			
2	N-PECET802T	Machine Learning			
3 -	N-PECET803T	Industrial Automation			





ACADEMIC RULES AND REGULATIONS 2023-24 (NEP VERSION: 01)

CURRICULUM SCHEME FOR B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-III

			н	ours ;	ver	11679)	Maxim	um Mari	is.	ESE
Sr. No.	Course Code	Course Title	72	week		Credits	Continuous	End		Duration
140.		PACE SECTION	L	T	P		Evaluation	Sem. Exam	Total	(Hrs.)
1	N-PCCME301T	Mathematics for Mechanical Engineering	2	1	0	3	40	60	100	3
2	N-PCCME302T	Kinematics of Machines	3	0	0	3	40	60	100	3
3	N-PCCME303T	Engineering Thermodynamics	3	0	0	3	40	60	100	3
4	N-PCCME304T	Material Science and Metallurgy	2	0	0	2	20	30	50	2
5	N-PCCME304P	Material Science and Metallurgy Lab	0	0	2	1	25	25	50	*
6	N-MDM	Multidisciplinary Minor Course-1	3	0	0	3	40	60	100	3
7	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
9	N-HSSMME301T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
10	N-VECME301T	Universal Human Values	2	0	0	2	50		50	
SEUL	N-CEPME301	Community Engagement Project (CEP)		200		3-	11.			
11	OR	The state of the s	0	0	4	2	50	-	50	-
	N-FPME301	Field Project (FP)			L					
12	N-MCME301	Indian Constitution	2	0	0	- 2	50	100	50	
-		Total	22	1	6	24	415	385	800	



(NEP VERSION: 01)

B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2024-2025

(NEP COMPLIANT)

2nd YEAR

SEMESTER-IV

			He	urs	per	-	Maxim	oum Mari	ks	ESE
Sr. No.	Course Code	Course Title	1015-55	weck	50 S X Y Y Y	Credits	Continuous	End	12.500	Duration
100.	Mark Control		L,	T	P	Seldenish	Evaluation	Sem. Exam	Total	(Hrs.)
1	N-PCCME401T	Fluid Mechanics	3	0	0	3	40	60	100	3
2	N-PCCME401P	Fluid Mechanics Lab	0	0	2	1	25	25	50	
3	N-PCCME402T	Mechanics of Deformable Solids	2	0	0	2	20	30	50	2
4.	N-PCCME402P	Mechanics of Deformable Solids Lab	0	0	2	1	25	25	50	
5	N-PCCME403T	Manufacturing Processes	2	0	0	2	20	30	50	2
6	N-PCCME403P	Manufacturing Processes Lab	0	0	2	-1	25	25	50	*
7	N-MDM	Multidisciplinary Minor Course-2	3	0	0	3	- 40	60	100	3
8	N-OEC	Open Elective Course- 2	3	0	0	- 3	40	60	100	3
9	N-SECME401P	Skill Enhancement Course- 1	0	0	2	1	25	25	50	
10	N-SECME402P	Skill Enhancement Course- 2	0	0	2	1	25	25	50	*
11	N-AECME02	Ability Enhancement Course	2	0	0	2	50	-	50	
12	N-HSSMME401T	Entrepreneurship Development	2	0	0	2	20	30	50	2
13	N-VECME401T	Environmental Studies	2	0	0	2	50	23	50	
	T	otal	19	0	10	24	405	395	800	







(NEP VERSION: 01)

B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-V

	Scheme of Teach	hing & Examination of Bachelor	of Te	chnol	ogy, \	Semester	B.Tech. (Mech	anical En	gineering)
	THE STATE OF	A SEPTEMBER OF	н	ours p	per		Maxim	um Mari	ca .	ESE
Sr. No.	Course Code	Course Title		week		Credits	Continuous	End Sem.	Total	Duration
			L	T	P		Evaluation	Exam		(Hrs.)
1	N-PCCME501T	Design of Machine Elements	3	0	0	3	40	60	100	3
2	N-PCCME502T	Heat Transfer	3	0	0	3	40	60	100	3
3	N-PCCME502P	Heat Transfer Lab	0	0	2	1	25	25	50	
4	N-PCCME503T	Manufacturing Technology	2	0	0	2	20	30	50	2
5	N-PCCME503P	Manufacturing Technology Lab	0	0	2	1	25	25	50	
6	N-PCCME504T	Measurements & Metrology	2	0	0	2	20	30	50	2
7	N-PCCME504P	Measurements & Metrology Lab	0	0	2	1	25	25	50	
8	N-PCCME505P	Machine Drawing and Solid Modelling Lab	0	0	2	1	25	25	50	
9	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
10	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
11	N-OEC	Open Elective Course- 3	2	0	0	2	20	30	50	2
1	1	Total	18	0	8	22	320	430	750	

Program Elective - 1

Sr. No.	Course Code	Course Title				
1	N-PECME501T	Hydraulic Machines				
2 N-PECME502T		Optimization Techniques				
3	N-PECME503T	Control Systems Engineering				





(NEP VERSION: 01)

B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2025-2026

(NEP COMPLIANT)

3rd YEAR

SEMESTER-VI

Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
							dits Continuous	End	200	Duration
			L,	T	P		Evaluation	Sem. Exam	Total	(Hrs.)
1	N-PCCME601T	Computer Aided Design	3	0	0	3	40	60	100	3
2	N-PCCME601P	Computer Aided Design Lab	0	0	2	1	25	25	50	
3	N-PCCME602T	Energy Conversion-I	3	0	0	3	40	60	100 .	3
4	N-PCCME603T	Dynamics of Machines	3	0	0	3	40	60	100	3
5	N-PCCME603P	Dynamics of Machines Lab	0	0	2	. 1	25	25	50	-
6	N-PEC	Program Elective - 2	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective - 3	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course - 4	3	0	0	3	40	60	100	3
9	N-SECME601P	Skill Enhancement Course - 3	0	0	2	1	25	25	50	4
10	N-SECME602P	Skill Enhancement Course - 4	0	0	2	1	- 25	25	50	*3
		Total	18	0	8	22	340	460	800	*:

Program Elective - 2

Sr. No.	Course Code	Course Title
1	N-PECME601T	Internal Combustion Engines
2	N-PECME602T	Industrial Engineering
-3	N-PECME603T	Hydraulic and Pneumatic Systems

Program Elective - 3

Sr. No.	Course Code	Course Title
1	N-PCCME604T	Refrigeration & Air Conditioning
2	N-PCCME605T	Automobile Engineering
3	N-PCCME606T	Environmental Engineering
2		Automobile Engineer



S. B. JAIN INSTITUTE OF TECHNOLOGY, MANAGEMENT & RESEARCH, NAGPUR.



4

(NEP VERSION: 01)

B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VII

	Service de la constitución de la	De DOS DOS DE LA COMPANSA DE LO COMP	Hours per		5.11	r B.Tech. (Mechanical Engineer Maximum Marks			ESE	
Sr.	Course Code	Course Title	week			End	RE I	PARCULA COLOR		
No			L	т	P	Credits	Continuous Evaluation	Exa	Total	Duration (Hrs.)
1	N-PCCME701T	Energy Conversion-II	3	0	0	3	40	60	100	3
2	N-PCCME701P	Energy Conversion-II Lab	0	0	2	1	25	25	50	15.
3	N-PCCME702T	Design of Mechanical Drives	3	0	0	3	40	60	100	3
4	N-PEC	Program Elective - 4	3	0	0	3	40	60	100	3
5	N-PEC	Program Elective - 5	3	0	0	3	40	60	100	3
6	N-MDM	Multidisciplinary Minor Course - 5	2	0	0	2	_ 20	30	50	2
7	N-PROJME701	Project: -1	0	0	8	4	75	75	1,50	
	7	Total	14	0	10	19	280	370	650	-

Program Elective - 4

Sr. No.	Course Code	Course Title
1	N-PECME701T	Power Plant Engineering
2	N-PECME702T	Statistics and Quality Control
3	N-PECME703T	Product Design and Development

Program Elective - 5

Sr. No.	Course Code	Course Title
1	N-PECME704T	Finite Element Analysis
2	N-PECME705T	Additive Manufacturing
3	N-PECME706T	Solar Energy Utilization





(NEP VERSION: 01)

B. TECH. MECHANICAL ENGINEERING

With Effect from Session 2026-2027

(NEP COMPLIANT)

4th YEAR

SEMESTER-VIII

Sr. No.	Course Code Course Title	1000			99	Maximum Marks			ESE	
		Course Title	Hours per week			Credits	Continuous	End		Duration
			L	Т	P		Evaluation	Sem. Exam	Total	(Hrs.)
1	N-PEC	Program Elective: - 6	3	0	0	3	40	60	100	3
2	N-RMEE801T	Research Methodology	3	0	0	3	40	60	100	3
3	N- PROJME801	Project-II	0	0	12	6	100	100	200	*/
1	To	tal	6	0	12	12	180	220	400	•
				OR		ii.				
1	N-ELCME801	Internship/On-Job Training (OJT)	Or	ie Sem	ester	12	100	100	200	

Program Elective - 6

Sr. No.	Course Code	Course Title
. 1	N-PECME801T	Renewable Energy Systems
2	N-PECME802T	Industrial Management
3	N-PECME803T	Automation in Manufacturing

Prof. (Dr.) Sanjay Badjate Principal & Chairman	day
Dr. Narendra Bawane University Nominee	B
Dr. Manuj Chandak University Neminee	Gear
Dr. Mahendra Kadu University Nominee	ore.
Dr. Abbiject Agasbe Educationalist	0
Dr. Rajendra Patrikar Educationalist	Pat
Mr. Ranjit Singh Industry Representative	- Hest
Dr. Pankaj Thote Dean Academics & HeD Electrical Engineering	W
Dr. Abhay Kasetwar HoD Electronics and Telecommunication Engineering	(Janton)
Dr. Mrudula Nimbarte HoD Computer Science and Engineering	A100
Mr. Amit Tajne HoD Mechanical Engineering and 1 st Year B.Tech.	7

Dr. Hemant Turkar HoD Emerging Technologies	W Char
Dr. Shrikrishna Dhale HoD Dept. of Management	Morris
Dr. Harish Bhatkulkar Teacher Representative	-81
Br. Mehammad Wasim Khamooni Teacher Representative	M
Dr. Khushi Sindhi Dean R&D, Teacher Representative	97
Dr. Chandrakant Rathore Teacher Representative	Gar
Mr. Vined Suple Special Invited	CM-
Mrs. Roshani Tulmale Special Invitee	Kkalu.
Dr. Mrs. Rupsli Kelkar Member Secretary	RKellan

