



ESTD : 1946

THE NATIONAL INSTITUTE OF ENGINEERING

(An Autonomous Institution under Visvesvaraya Technological University, Belagavi)

Recognised by AICTE, New Delhi, Grant-in-Aid by Government of Karnataka,

Accredited by NAAC, New Delhi

2020 Outcome Based EDUCATION

ACADEMIC REGULATIONS

UNDER - GRADUATE PROGRAMMES

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PREFACE

Dear Students,

The National Institute of Engineering (NIE) is a premier technical institution of the country started seventy four years ago. Right from its inception, focus at NIE is to deliver value based education with academically well qualified faculty and infrastructure. NIE now offers seven UG and twelve PG programmes. Research activities undertaken at the institute have brought laurels and given unique status to our UG and PG programmes. The alumni of NIE have achieved excellence in their chosen professions and their accomplishments are of immense value to the institute. It is a matter of pride that NIE continues to be the preferred destination for students to pursue an engineering degree.

In the year 2007, NIE was granted academic autonomy by Visvesvaraya Technological University (VTU), Belagavi. From then onwards our prime focus is on developing and delivering a curriculum which caters to the needs of various stakeholders. The curriculum has unique features enabling students to develop critical thinking, solve problems, analyse socially relevant issues, etc. The academic cycle designed on the basis of Outcome Based Education (OBE) strongly emphasizes continuous improvement and this has made our curriculum responsive to current requirements. Five UG programmes and three PG programmes were recently accredited under Tier-1 of the National Board of Accreditation (NBA), New Delhi. NIE has been accredited by National Assessment and Accreditation Council (NAAC) with the grade of B⁺⁺ in the first cycle valid for a period of 5 years from 04.02.2020. NIE's progress towards further academic excellence is visualized in the realms of continuous improvement with increase in physical and intellectual infrastructure.

The curriculum at NIE has been developed by experts from academia and industry and it has unique features to enhance problem solving skills apart from academic enrichment. The curriculum of UG programmes has been thoroughly revised as per AICTE guidelines and we have incorporated unique features such as competency training, industry driven elective & long internship. The curriculum is designed in a way so as to impart engineering education in a holistic way.

I hope you will have a fruitful stay at NIE.

Dr. K. Raghuv
Principal

December 2020

Dear Students,

It gives me great pleasure to welcome you to The National Institute of Engineering (NIE) where academics and activities never cease as students are groomed in the fields of engineering and technology. Our dedicated team of highly talented faculty members is always trying to strive for academic excellence and overall personality development. The major emphasis of imparting training at NIE is to encourage enquiry and innovation among our students and lay the strong foundation for a future where they are able to face global challenges in a rapidly-changing scenario. Efforts are being made to design the curriculum based on Bloom's Taxonomy framework, to meet the challenges of the current technical education.

NIE is making sincere efforts in meeting the global standards through new formats of National Board of Accreditation, New Delhi and timely World Bank-MHRD initiative TEQIP (Technical Education Quality Improvement Program). A new curriculum based on AICTE model curriculum and guidelines of VTU, is being devised, starting from next academic year.

We will make a genuine attempt in assisting you during the times of your trials and tribulations. You are exposed to the world of Engineering through a unique three week Induction Programme. We have also set up a Student Mentoring Programme (SMP) from the academic year 2016, through the voluntary efforts of the 3rd year students of your branch and our faculty members. You can approach them at any time during your stay at the NIE campus to address any of your concerns regarding either academic matters or life in the campus. In case of special needs, you are also advised to seek the help of the Student Welfare Officer or me.

I sincerely hope that your academic pursuit in NIE will be fruitful and enjoyable in every aspect
Wishing you the very best.

Dr. M.S. Ganesh Prasad
Dean (Academic Affairs)

December 2020

REGULATIONS

ACADEMIC REGULATIONS

1.0. TITLE AND COMMENCEMENT:

- 1.1. These Regulations shall be called “The National Institute of Engineering, Mysuru, (NIE) Regulations under Visvesvaraya Technological University, Belagavi, Autonomous College Statutes - 2006 for Academic Autonomy - 2016” for UG programmes.
- 1.2. This set of Regulations, on approval by the Governing Body, shall supercede all the corresponding earlier sets of regulations of the B.E. Degree programmes of VTU along with all the amendments thereto, and shall be binding on all students undergoing the Graduate Degree Programme(s) (Credit System) at NIE, Mysuru. This set of Regulations may evolve and get refined or updated or amended or modified or changed through appropriate approvals from the Academic Council and/or Governing Body from time to time, and shall be binding on all parties concerned, including the Students, Faculty and the Staff of Departments. The decision of the Governing Body shall be final and binding.
- 1.3. The provisions contained in this set of Regulations govern the policies and procedures on the Registration of students, imparting course instruction, conduct of the examination and evaluation and certification of students' performance and all amendments thereby leading to the award of the said Degree(s).
- 1.4. The Regulations shall come into effect from the date of obtaining approval from the Governing Body of the College.

2.0. ABBREVIATIONS:

- a) “Academic Autonomy” means freedom to the College in all aspects of conducting its academic programmes, granted by the University for promoting excellence.
- b) “Autonomous College” means The National Institute of Engineering, Mysuru, designated as an autonomous college by the University, as per the VTU Autonomous College Statute - 2006.
- c) “Commission” means University Grants Commission (UGC).
- d) “Council” means All India Council for Technical Education (AICTE).
- e) “Statute” means VTU Autonomous College Statute - 2006.
- f) “University” means Visvesvaraya Technological University (VTU), Belagavi.
- g) “Institute” or “College” means The National Institute of Engineering, Mysuru (NIE).

3.0. ACADEMIC CALENDAR:

- 3.1. The total duration of an academic programme shall be the same as that followed by the University. i.e., four years for B.E. The maximum period which a student can take to complete a full-time academic programme shall also be similar to that prescribed by the University, viz., double the nominal duration prescribed for the programme, i.e., eight years

for B.E. For students being admitted to 3rd semester B.E. degree programme under the lateral entry scheme, the maximum duration to complete the programme shall be six years from the date of admission.

3.2. Each academic year is split into two semesters. The term of the semester for teaching B.E. is 16 weeks. Generally, each semester is of 20 weeks duration which will include the period for teaching, examination and announcement of results. Typically, odd semester is from August to December and even semester is from January to May. In case of requirement under special circumstances, a Makeup Term of required duration as approved by the Academic Council may be offered in between even and odd semesters. The Summer term, whenever offered, may be limited only to teach value added/add-on courses and/or courses as approved by the Principal.

3.3. In general, the academic schedule of a semester includes the following:

- Date of starting of semester.
- Course registration period.
- Date of events of Continuous Internal Evaluation (CIE).
- Date of beginning of Semester End Examination (SEE) / Semester End Test (SET).
- Date of Announcement of results.
- Inter semester vacation period, if provided.

This academic schedule, shall be prepared by the Dean (Academic Affairs) in consultation with the Principal, approved by the Academic Council (AC) and shall be announced at least one week before the beginning of the semester.

3.4. In case of an eventuality of losing a teaching day due to unavoidable reasons, such a loss shall be made up by having teaching / laboratory / tutorial sessions on a suitable holiday by adhering to the time table of the day which was lost.

4.0. ELIGIBILITY FOR ADMISSION:

4.1. Admission to First year, first semester Bachelor's Degree in Engineering (B.E.) shall be open to the candidates who have passed the Second year Pre-University or XII standard or equivalent examination recognized by the University.

In addition to the above, the candidate shall have secured not less than forty five percent (45%) marks in the aggregate with Physics and Mathematics as compulsory subjects, along with one of the following subjects: - Chemistry, Bio-Technology, Computer Science, Biology and Electronics. Provided that, the minimum marks for the purpose of eligibility shall be forty percent (40%) in optional subjects in case of candidates belonging to SC/ST and OBC. Provided that, the candidate shall have studied and passed English as one of the subjects.

4.2. Admission to II year, III semester Bachelor Degree in Engineering/Technology (Lateral Entry) shall be open to the candidates who have passed a Diploma or equivalent examination, as recognized by the University. Provided that the candidate has secured not

less than forty percent (40%) marks, in the final year examination (fifth and sixth semesters) in respect of candidates belonging to SC/ST and OBC and not less than forty five percent (45%) marks in case of other candidates in the appropriate branch of engineering specified in relevant Government order issued from time to time. Such a candidate shall pass / satisfactorily complete prescribed bridge courses as specified by the college.

- 4.3. Those candidates who have passed a qualifying examination other than the II-year PUC examination of the Pre-University Education Board of Karnataka or Engineering Diploma Examinations of the Board of Technical Education of Karnataka have to obtain eligibility certificate for seeking admission to B.E. Degree course from the University.
- 4.4. Relevant Government/University orders issued from time to time in this regard shall prevail.

5.0. ADMISSION AND FEES:

- 5.1. Admission shall be made in accordance with the policy guidelines issued from the Ministry of Higher Education, Council, Government of Karnataka and University from time to time. Seats are reserved for candidates belonging to Scheduled Castes and Scheduled Tribes, physically challenged candidates, children of defense personnel and other categories as per the orders issued by the Govt. of Karnataka.
- 5.2. Admission to all programmes shall be made in the odd semester of each academic year at the first-year level based on the relative performance in the Entrance Examination (CET/COMEDK) as per the orders issued by the Govt. of Karnataka from time to time. The candidates should have successfully passed 10+2 examination with the combination of subjects prescribed by Govt. of Karnataka.
- 5.3. A limited number of admissions are offered to NRI and Management candidates in accordance with the rules applicable for such admission, issued from time to time by Govt. of Karnataka/Council.
- 5.4. The College may admit students to the 3rd semester of the B.E. Programme directly under Lateral Entry Scheme as per Govt. rules or on transfer from other Colleges observing the Guidelines applicable and subject to approval from the University.
- 5.5. Student Exchange Programme and consequent Transfer of Credits in such cases shall be as per the decision and approval by the Competent Authorities such as the Departmental Council (DC), Board of Studies (BOS) and Academic Council (AC).
- 5.6. After admission of a candidate to a programme, if it is found that He/she had in fact not fulfilled all the requirements stipulated in the offer of admission, in any form whatsoever, including possible misinformation etc., the Principal is authorized to cancel the admission of the candidate.
- 5.7. The College reserves the right to cancel the admission of any student and ask him/her to discontinue the studies at any stage of their career on the grounds of unsatisfactory academic performance or indiscipline or any misconduct.

- 5.8.** Candidates must fulfill the medical standards required for admission.
- 5.9.** Every student of the College shall be associated with the Parent Department offering the degree programme that the student undergoes throughout his/her study period.
- 5.10.** The fee structure as stipulated by Govt. of Karnataka from time to time shall be applicable for all the admitted students.

6.0. PROGRAMME STRUCTURE:

- 6.1.** The structure for a B.E. Degree programme typically consist of the following components:
- a) Basic Science Core Courses.
 - b) Engineering Science Core Courses (Engineering Foundation courses).
 - c) Humanities and Social Science Core courses.
 - d) General Core, Fundamental Core Courses.
 - e) Elective Courses:
General Elective, Fundamental Elective, Open Elective.
 - f) Seminar, Mini Project, Internship, Major Project
 - g) Mandatory Learning Courses
- 6.2.** Departmental Council (DC) shall discuss and recommend the exact credits offered for the programme for the above components 'a' to 'g', the semester wise distribution among them, as well as the syllabi of all undergraduate courses offered by the department from time to time before sending the same to the Board of Studies (BOS). The BOS will consider the proposals from the departments and make recommendations to the Academic Council (AC) for consideration and approval.
- 6.3.** The Credit Requirement for the B.E. Degree is 175.
- 6.4.** The credit requirement for the lateral entry students for award of the B.E. Degree is 135. In addition, they shall also complete satisfactorily the mandatory learning courses, Humanities & Social Science courses and Bridge courses as specified from time to time.
- 6.5. Seminar and Project:**
- a) Seminar topic shall be selected from the emerging technical areas only. Each candidate has to give at least one seminar satisfactorily.
 - b) Project work in 8th semester shall be completed batch wise and the batch shall normally consist of 2 to 4 candidates.
 - c) Project viva-voce examination shall be conducted individually.
- 6.6. Earning of Activity Points for the Award of Degree:**
- Apart from technical knowledge and skills, to be successful as professionals, students should have excellent soft skills, leadership qualities and team spirit. They should have entrepreneurial capabilities and societal commitment. In order to match these multifarious requirement, AICTE has created a unique mechanism of awarding Activity Points over and above the academic grades.

- a) Every day college regular student admitted to the 4 year degree programme and every student entering 4 year degree programme through lateral entry, shall earn 100 and 75 Activity points respectively for the award of degree through AICTE activity programme. Students transferred from other Universities to fifth semester are required to earn 50 Activity points from the year of entry to VTU.

Sl.No.	Student Category	Activity Points Prescribed by AICTE
1.	Day College regular student admitted to the 4 years Degree programme	100
2.	Students entering 4 year Degree programme through lateral entry	75
3.	Students transferred from other Universities to fifth semester	50

- b) The Activity points earned shall be reflected on the student's eighth semester grade card.
- c) The activities can be spread over the years (duration of the programme), anytime during the semester weekends and holidays, as per the interest and convenience of the student from the year of entry to the programme. However, minimum hours specified must be satisfied.
- d) Activity points (non-credit) have no effect on SGPA/CGPA and shall not be considered for vertical progression.
- e) In case students fail to earn the prescribed Activity points, eighth semester Grade Card shall be issued only after earning the required Activity points. Students shall be admitted for the award of degree only after the release of the eighth semester grade cards.

7.0. REGISTRATION:

Each student after consulting his/her faculty advisor shall register for the courses in every semester on the days specified for registration.

- 7.1. A student has to register for a minimum of 20 credits in each semester. The maximum number of credits a student can take in a semester is 28. However, the minimum/ maximum credit limit can be relaxed by the Principal, on specific recommendations of Departmental Council only under exceptional circumstances.
- 7.2. For a student to register for some courses he/she may be required to have adequate knowledge about one or many courses which are declared as pre-requisite courses in the earlier semesters. The student is deemed to have satisfied this requirement by satisfying the Clause of minimum attendance (Cl.11.11) in the course(s) which is/are declared as pre-requisite(s). The details of the pre-requisites will be announced by the Departmental Council as a part of the programme curriculum.
- 7.3. Late registration up to a cut off date mentioned in the academic calendar is allowed on payment of a penal fee.
- 7.4. A student will be allowed to register for the next semester only when he/she fulfils the following conditions:

- a) Cleared the entire previous semester fees due, if any, to the institute, hostel and library and also has paid all advance deposits of the Institute and hostel for the semester for which he/she is registering.
- b) Satisfies all academic requirements, namely the credits earned and minimum CGPA, to continue with the programme. (Clause 11.10)
- c) Not restrained from registering due to any specific reason by the college.

7.5. Registration in Absentia will be allowed only in exceptional cases at the discretion of Principal after the recommendation of the Departmental Council through the authorized representative of the student.

7.6. Drop-option: A student has the option to DROP courses already registered till one week after the second event of CIE in consultation with his/her faculty advisor. However, the number of credits after dropping one or more courses shall satisfy Clause 7.1.

8.0. WITHDRAWAL FROM THE PROGRAMME:

8.1. Temporary Withdrawal:

- a) A student who has been admitted to a degree programme of the college may be permitted to withdraw temporarily, for a period which is an integral multiple of a semester on the grounds of prolonged illness or grave calamity in the family or employment etc., provided that:
 - i) The student applies to the College within at least 6 weeks of the commencement of the semester or from the date he/she last attended the classes, whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of his/her parent/guardian.
 - ii) The College is satisfied that, even after counting the expected period of withdrawal, the student has the possibility to complete his/her requirements of the degree within the time limits specified by the University.
 - iii) There are no outstanding dues or demands, with the Department/College/Hostel/Library, etc.,
 - iv) The tuition fees for all the subsequent semesters may be collected in advance before giving approval for such Temporary Withdrawal, until such time his/her name appears in the student's roll list. However, the fees/charges once paid shall not be refunded.
 - v) Scholarship holders are bound by the appropriate rules applicable to them.
 - vi) The decision of the Principal of the College regarding withdrawal of a student is final and binding.
- b) Normally, a student would be permitted to avail the temporary withdrawal facility as a special case only once during his/her tenure as a student and this withdrawal period shall also be counted for computing the duration of study as specified by the University.

- c) If a student has withdrawn from the programme for reasons of employment, when rejoining the programme, he/she should obtain the necessary permission from his/her employer for rejoining. This permission letter has to be submitted at the time of rejoining.

8.2. Permanent Withdrawal:

Any student who withdraws admission before the closing date of admission for the academic session is eligible for the refund of the deposits only. Fees once paid will not be refunded.

Once the admission for the year is closed, the following conditions govern withdrawal:

- a) A student who wants to leave the College for good, will be permitted to do so (and take Transfer Certificate from the College, if needed), only after remitting the tuition fees as applicable for all the remaining semesters and clearing all other dues, if any.
- b) Those students who have received any scholarship, stipend or other forms of assistance from the College shall repay all such amounts.
- c) The decision of the Principal of the College regarding withdrawal of a student is final and binding.

9.0. CHANGE OF BRANCH:

- 9.1. Normally a student admitted to a particular branch of the undergraduate programme will continue studying in that branch till completion.
- 9.2. However, in special cases the college may permit a student admitted to change from one branch of studies to another after the first two semesters. Such changes will be permitted, in accordance with the provisions laid down by the concerned competent authority.
- 9.3. Normally, only those students who have completed in their first attempt all the common credits registered in the first two semesters of their studies will be eligible for consideration of change of branch after the second semester.
- 9.4. Application for change of branch shall be made by the intending eligible students in the prescribed form.
- 9.5. A common CGPA list shall be prepared at the end of the second semester to consider students for branch change.
- 9.6. Change of branch shall be strictly in the order of merit of the applicants. For this purpose the CGPA obtained at the end of the second semester shall be considered. In case of a tie, the marks obtained in the qualifying examination of the applicants will be considered.
- 9.7. The applicants may be allowed a change in branch, strictly in order of inter merit as stipulated by the competent authority from time to time. The number of vacant seats available in a particular branch is determined by the maximum sanctioned intake relative to the actual number of students present in the beginning of the third semester before implementation of the branch change process.

9.8. The Branch Change process shall be completed within the first week of commencement of the third semester term.

9.9. In this regard, the decision of the competent authority is final and binding.

10.0. TRANSFER OF STUDENTS:

10.1. Transfer of students from one College to another College within Karnataka State is permitted only at the beginning of odd semester, subject to availability of seats within the permitted intake.

10.2. The candidate seeking admission shall apply for establishment of equivalence with prescribed fees as notified by the College.

10.3. The students transferred from other colleges shall take additional courses, if required, as specified by the respective Departmental Council to meet the academic requirements of the College.

10.4. In all transferred cases, the equivalent SGPA and CGPA will be computed on the basis of the norms followed in the college. The decision taken in this regard by the Principal is final which shall be ratified in the Academic Council (AC).

11.0. EVALUATION SYSTEM:

11.1. Each course has its Lecture – Tutorial – Practical (L-T-P) schedule. The credit for each course is based on following:

Lecture: one hour/week is given one credit.

Tutorial/Practical/ Project work: Two hours/ week is given one credit.

11.2. The evaluation of academic performance of a student is done as per Letter grading system. A ten point Letter grading system is adopted which denotes the level of academic performance. The grade awarded to a student in a theory course shall be based on his/her performance in Test, Assignment, Quiz, Tutorial, etc. in addition to Semester End Examination (SEE). The weightage of these components shall be as follows:

Continuous Internal Evaluation (CIE)	Tests, Assignment, Quiz, Tutorial, etc. (as per Clause 11.5)	50%
Semester End Examination (SEE)	Written or online or practical	50%

11.3. Grades and Grade Points:

Absolute grading system shall be adopted as follows:

Grade points scale for Absolute Grading							
Level	Out Standing	Excellent	Very Good	Good	Above Average	Average Performance	Fail
Grade	S	A	B	C	D	E	F
Grade points	10	09	08	07	06	04	00
Score (Marks) Range %	≥ 90	80 - 89	70 - 79	60 - 69	50 - 59	40 - 49	< 40

- a) A minimum of 40% of marks has to be secured in CIE for appearing for a theory examination.
- b) A minimum of 40% of marks has to be scored in SEE for passing a theory course.
- c) A minimum of 40% of marks shall be obtained in (CIE+SEE/SET) for passing a theory course or even an integrated course.
- d) In case of a practical course/Drawing class, based on a suitable continuous evaluation scheme, the student's performance shall be evaluated in every practical / Drawing class. This shall have a weightage 50% (as CIE). The student must score a minimum of 50% of marks in this CIE for taking up the Semester End Test (SET). SET will have 50% weightage.
- e) A candidate who does not secure minimum marks in CIE shall be awarded 'W' grade. The candidate shall repeat those courses wherein he/she has secured 'W' grade when the course is offered again in any subsequent semester.

11.4. The letter grade awarded to a student in a practical course is based on a suitable continuous evaluation scheme which the Course Instructor should evolve with the approval of Departmental Council. The student's performance in every Practical / Drawing class shall be evaluated and this shall have a weightage of 50%. He/she shall be evaluated for another 50% by conducting a SET. The grades shall be awarded based on evaluation of (CIE and SEE) (or) (CIE + SET) components. Further by conducting periodical tests and/or Semester End Test (SET) Which shall have another 50% weightage. The grades shall be awarded based on these two evaluation components. For Minor Project/ Seminar/ Internship only CIE component is there and evaluation shall be based on two presentations by appropriate Rubrics. For Major Project CIE is based on two presentations which will have a weightage of 50% and SEE will be conducted with an external examiner with a weightage of 50%. The grades shall be awarded based on evaluation of (CIE and SEE).

The minimum passing marks for Practical/ Drawing course/ Major Project/ Minor Project/ Seminar/ Internship is 50% (D Grade).

11.5. The Course Instructor shall make an announcement within one week of the beginning of the semester about Blown up syllabus, details of the evaluation scheme which includes distribution amongst various components. This announcement shall be made in both theory and practical courses. A copy of this announcement should reach the office of Controller of Examinations (CoE) within ten days of the beginning of the semester.

11.6. Description of Grades:

S grade : This grade stands for Superlative grade which indicates outstanding achievement by the student.

A grade : This grade stands for Excellent performance.

B grade : This grade stands for Very Good performance.

C grade : This grade stands for Good performance.

D grade : This grade stands for Above Average performance.

E grade : This grade stands for Average performance and is the minimum passing grade.

F grade : This grade denotes failure and hence very poor performance. A student who obtains 'F' grade in a course shall repeat that course in subsequent semester or makeup term when it is offered. However, if a student gets 'F' grade in an elective theory course, he / she can register for the same elective or an alternative elective, as recommended by the Faculty Advisor and approved by the Departmental Council to satisfy the credit requirement in subsequent semesters.

I grade : This grade is a transitional grade which denotes incomplete grade. A student having satisfactory attendance and meeting the passing standard of CIE but remained absent from SEE due to illness/ accident/ calamity in the family at the time of Semester End Examination for a course will be awarded this grade. The DC can consider the request of any such student for a make up examination and depending on the merit of the case and in consultation with the course instructor, permit him/her to appear for make up examination. The 'I' grade would be converted into one or the other of the letter grades (S/A/B/C/D/E/F) after the student completes the course requirements. If the student fails to get the minimum passing grade in makeup examination, he/she shall repeat the course in a subsequent semester when it is offered.

X grade : This grade is a transitional grade which denotes incomplete grade. A student having satisfactory attendance and having high CIE rating ($\geq 90\%$) in a course, but SEE performance is poor, which could result in an overall 'F' grade in the course, will be awarded this grade. The DC can consider the request of any such student for a make up examination and depending on the merit of the case and in consultation with the course instructor, permit him/her to appear for make up examination. The 'X' grade would be converted into one or the other of the letter grades (S/A/B/C/D/E/F) after the student completes the course requirements. If the student fails to get the minimum pass grade in make up examination, he/she shall repeat the course in a subsequent semester when it is offered.

W grade : This grade is awarded to a student having satisfactory attendance, but withdrawing from a course before the prescribed date in a semester under the advice of the Faculty Advisor. Withdrawal from a course shall be allowed only under exceptional circumstances and has to be recommended by the DC. No withdrawal is permitted after the grades are announced. Further, a candidate having shortage of attendance and/or fail to achieve the minimum requirements in CIE shall also be awarded this grade.

Calculation of SGPA and CGPA:

$$\text{SGPA} = \frac{\sum [(\text{course credits}) \times (\text{Grade points})] \text{ for all courses, including F and Transitional grade (in that semester)}}{\sum [(\text{course credits})] \text{ for all courses, including F and Transitional grade (in that semester)}}$$

$$\text{CGPA} = \frac{\sum [(\text{course credits}) \times (\text{Grade points})] \text{ for all courses, excluding F and Transitional grade (until that semester)}}{\sum [(\text{course credits})] \text{ for all courses, excluding F and Transitional grade (until that semester)}}$$

11.7. Process of Evaluation, Announcement and Review of Grades:

- a) The evaluation procedure to be adopted by a course instructor shall be announced at the beginning of the semester, so that this procedure will be made known to all the registered students. A copy of this procedure shall be submitted within one week of the commencement of the semester to the Chairman of the DC and upon subsequent approval by the DC, it should reach the office of Controller of Examinations (CoE).
- b) After the Semester End Examination, the papers will be evaluated and provisional results are announced. Then, as per the announcement made by Controller of Examinations (CoE) process of “paper seeing” will be arranged for those students who have paid the prescribed fee. During paper seeing, those students who wish to see their evaluated papers can meet the concerned Course Instructor and get clarification from him/her about the marks. The results are finalised after the event of paper seeing.
- c) In case, a student has a grievance even after obtaining clarification from the Course Instructor during paper seeing, he / she can make a written appeal to the respective Chairman of the Departmental Council and request for a review of the marks. The DC shall look into the details and make a recommendation. The recommendation of the DC shall then be sent to the office of CoE for further processing as per “Examination Manual” of the college. The processing fee for such an appeal will be decided by the Academic Council. If the appeal of the student is upheld, the fee shall be refunded.

11.8. Make-up Term [F grades]:

The “Make-up Term” may be offered during even-odd Semester Vacation, to provide an opportunity for the failed Students to clear the Course. The details are as follows:

- a) A Student who has failed in a SEE (Theory/Practical) in the current academic year may register for the “Make-up Term”.
- b) The Student should have obtained the minimum stipulated marks in CIE in the course(s) for which he/she wishes to register in the “Make-up term”.
- c) The Student should have obtained minimum required attendance for the corresponding course earlier.
- d) The normal duration of the “Make-up Term” is 4 weeks at the end of Even Semester immediately after the announcement of the Even Semester results.
- e) First two weeks of the “Make-up Term” are to be utilized by the Student for studying, getting clarifications by meeting the Course Instructor and get prepared for the Examination.
- f) Remaining two weeks of the “Make-up Term” are scheduled for conducting the Examinations, evaluation and announcement of the result.

- g) A Student can utilize the “Make-Up Term” only once to pass a course. A Student failing in the “Make-Up Term” Examination shall re-register for that course in a subsequent semester as and when the course is offered.
- h) The Student shall pay the specified amount of Registration/ Examination fees to appear for the “Make-Up Term” Examination.
- i) The necessary Academic Staff shall be available for Teaching, Counseling and Conducting the Examinations.

11.9. Make-up Examination [X and I grades]:

The Make Up Examination facility would be available to students who may have missed to attend the SEE of one or more courses in a semester for valid reasons and given the 'I' grade; Also, students having the 'X' grade shall also be eligible. This facility can be availed by UG students only twice during their programme. The make up examination would be held as per dates notified by the CoE. Make up examination could be held at any time in the semester with the approval of the Principal. In all these cases, the standard of SEE would be the same as the regular SEE.

All the 'I' and 'X' grades awarded to the students would be converted within two days of the respective make-up examinations to appropriate letter grades. Any outstanding 'I' and 'X' grades two days after the last scheduled make-up examination shall be automatically converted to 'F' grade.

11.10. Vertical Mobility Requirements (UG) [Prior to 2019 admission batch]:

- a) A student shall register for a minimum of 20 credits in each semester. This rule is relaxed only for makeup term when it is offered.
- b) Earned credits are those credits for which the student would have obtained S/A/B/C/D grade.
- c) The regular semester load is declared by the Departments for each programme at the beginning of every semester. Hence the yearly academic load is the sum of the regular semester loads of odd and even semester. Then the shortfall of credits= Yearly academic load – Number of Earned credits in that year. The threshold details at the end of every year are as follows:

Shortfall = 0 (All credits Earned)	Shortfall of <=14 credits	Shortfall of credits >14
Eligible to move to next year.	Should complete the shortfall in credits by repeating only those courses for which ‘F’ or ‘W’ grade is obtained and move to the next year.	Not eligible to move to the next year. Should repeat only those courses wherein he/she has Obtained ‘F’ or ‘W’ grade. Hence in this case he/she is permitted to register for less than 20 credits in a semester overriding the Provisions of 11.10 (a).

When a student must move from 2nd year to 3rd year, he/she Should have completed yearly academic load of 1st year and likewise, to move from 3rd year to 4th year, he/she should have completed yearly academic load of 1st year and 2nd year except as per the following in (d).

- d)** A candidate is allowed to move to 3rd year if he/she has a maximum of two 'W' or 'F' grades in 1st and 2nd year put together with not more than one 'W' or 'F' grade in a semester during these years. Likewise, this provision is applicable for vertical mobility of a candidate to move to 4th year if He/ She has maximum of Two 'W' grades in 2nd and 3rd year put together with not more than one 'F' grade during these years and has obtained at least minimum pass grade in all the courses of 1st year academic load.

After computing the shortfall of credits as detailed in 11.10(c) for two successive years this clause is applicable.

- e)** The minimum and maximum duration of the Programme is as specified in Clause 3.1. If a student cannot complete the Programme in corresponding maximum duration, he/she shall leave the college without a degree. If a student is not able to pass a credit course even after 5 (five) consecutive attempts he/she shall also leave the college without a degree. For this purpose, an attempt is defined as registration in a regular semester.
- f) 4 'F' rule introduced by VTU circular vide Ref.No.VTU/BGM/Aca-08/Gen-Cirs/2019-20/4080 dated 3rd Sept. 2019, w.e.f 2019-20 batch onwards.**

Regular Students:

For admission to III semester	<ul style="list-style-type: none"> • Can carry four courses from I and II semester
For admission to V semester	<ul style="list-style-type: none"> • Can carry four courses from I to IV semester
For admission to VII semester	<ul style="list-style-type: none"> • Should have cleared I year courses • Can carry four courses from III to VI semester

Lateral Entry Students:

For admission to V semester	<ul style="list-style-type: none"> • Can carry four courses from III and IV semester
For admission to VII semester	<ul style="list-style-type: none"> • Can carry four courses from III to VI semester

11.11. Attendance requirements:

- a)** Each student must attend every theory class, tutorial and practical sessions for which he/she has registered.
- b)** To account for approved leave of absence (e.g. Representing the college in Sports/ Extra curricular / Placement / NCC or NSS activities), the attendance requirement shall be a minimum of 85% of the classes held. Further condonation by the Principal for a maximum of 10% attendance will be allowed to account for any exigencies like illness / medical emergency / death of a relative, with a specific recommendation by the HoD.

- c) If a student has less than 75% attendance in any course, he/she shall be awarded 'W' grade in that course irrespective of his/her academic performance.
- d) In a practical course, if student misses four consecutive weeks of class without any prior permission, he / She shall be awarded 'W' grade in that course irrespective of his academic performance.
- e) In an integrated course the student must obtain the minimum attendance requirement in both theory and practical classes as per clause 11.11 (b) and 11.11 (d)

11.12. Summer Term:

The '**Summer Term**' may be offered (based on SEE performance) during the **Even – Odd** semester vacation to provide an opportunity for the students of UG programme to complete satisfactorily, some courses where in he/she has a 'W' grade. The details are as follows:

- a) A student who is currently in the final year of UG Programme can register for summer term if he/she has maximum of two 'W' grade in the courses registered in the academic year. By registering for these courses and satisfactorily clearing them, he/she should be completing all the requirements for award of the degree as per clause 15.1.
- b) Students with the subjects of 1st year in the current academic year and has maximum of two 'W' grades can register for summer term.
 1. The normal duration of 'Summer Term' is **up to 8 weeks** (or equivalent No. of classes may be held in short period than 8 weeks) which shall include classes, provision to conduct CIE and SEE. The rigor and standards of CIE and SEE shall be the same as that of a regular semester.
 2. The classes will be conducted as per the scheduled time table. The departments must schedule the classes such that the entire syllabus is completed within the stipulated time. The attendance requirements are as per Clause 11.11.
 3. The student shall register for 'Summer Term' by paying a fee prescribed by institute.
 4. If a student is not able to satisfactorily complete the courses registered in Summer Term or not taken the Summer Term, he/she shall register for these courses during regular semester when they are offered again.

12.0 TERMINATION FROM THE PROGRAMME:

- 12.1. A student who is not performing well in terms of obtaining requisite grades and/ or is abstaining from the classes regularly, shall be warned of the consequences and the same shall also be communicated to his/her parents.

12.2. A student may be required to withdraw from the programme and leave the College on any of the following grounds:

- a) Obtaining F Grade and hence not passing a course, in spite of five successive attempts;
- b) A student failing to secure CGPA ≥ 5.0 on three consecutive semesters;
- c) Absence from classes for more than six weeks at a time in a semester without leave of absence being granted by competent authorities;
- d) Failure to meet the standards of discipline as prescribed by the College from time to time.

12.3. Conduct and Discipline:

Students shall conduct themselves within and outside the premises of the College, in a manner befitting the students of an Institution of National Importance. As per the order of Honorable Supreme Court of India. Ragging in any form is considered as a criminal offence and is banned. Any form of ragging will be severely dealt with.

The following acts of omission and/or commission shall constitute gross Violation of the code of conduct and are liable to invoke disciplinary measures:

- a) Ragging
- b) Lack of courtesy and decorum; indecent behavior anywhere with in or out side the campus.
- c) Willful damage or stealthy removal of any property/belongings of the College/ Hostel or of fellow students/citizens.
- d) Possession, consumption or distribution of alcoholic drinks or any kind of hallucinogenic drugs.
- e) Mutilation or unauthorized possession of Library books.
- f) Noisy and unseemly behavior, disturbing studies of fellow Students.
- g) Hacking in computer systems (such as entering into other Person's area without prior permission, manipulation and/or damage of computer hardware and software or any other Cyber crime etc.).
- h) Plagiarism of any nature.
- i) Any other act of gross indiscipline

Commensurate with the gravity of offense, the punishment may be: reprimand, expulsion from the hostel, debarment from an examination, disallowing the use of certain facilities of the College, rustication for a specified period or even outright expulsion from the College, or even handing over the case to appropriate law enforcement authorities or the judiciary, as required by the circumstances.

For an offence committed in (i) a hostel (ii) a department or in a class Room and (iii) elsewhere with in the college campus, the Chief Warden, the Head of the Department and the Student Welfare Officer shall meet as a Committee and recommend for reprimanding or imposition of fine. Such recommendations shall be reported to the Principal for further action.

Cases of adoption of unfair means and/or any malpractice in an examination shall be reported to the Principal for taking appropriate action.

13.0. STUDENTS' FEEDBACK:

- a) It is recommended by the university that Autonomous Colleges obtain feedback from students on their course work and various academic activities conducted under the credit system. For this purpose, suitable feedback forms shall be devised by the College and the feedback obtained from the students regularly in confidence, by administering the feedback form in print or on-line.
- b) The feedback received from the students shall be discussed at various levels of decision making at the College and the suggested changes/ improvements, if any, could be given due consideration for being implemented at the College level.

14.0. ACADEMIC COMMITTEES:

14.1. Departmental Council (DC):

Constitution:

There shall be one DC for every department that is involved in the teaching for the all the programme. The constitution shall be:

1. Chairman : Head of the Department
2. 2-4 Members : One each from Professor, Associate Professor and Assistant professor cadre based on seniority and by rotation for 1 year
3. Member Secretary : HoD's nominee

The Chairman may co-opt and/or invite more members.

Functions:

- a) To monitor the conduct of all undergraduate courses of the department.
- b) To ensure academic standard and excellence of the courses offered by the department.
- c) To oversee the evaluation of the students in a class, for each of the courses.
- d) To develop the curriculum for undergraduate courses offered by the department and recommend the same to the BoS.

- e) Moderation (only if and when found necessary) in consultation with the course instructor and approval of the finalized grades, before submission of the same to the office of the Principal.
- f) To consolidate the registration of the students and communicate the same to the course Instructors and Principal.
- g) To conduct performance appraisal of course instructors.
- h) To provide feed back of the performance appraisal to the course Instructor and concerned authorities.
- i) To consider any matter related to the undergraduate programme of the Department.
- j) In cases where a course is taught by more than one faculty member, or by different faculty members for different sections of students, DC shall coordinate (only in case of need) among all such faculty members regarding the teaching and evaluation of such courses.
- k) To conduct at least two meetings each semester and send the resolutions of the meeting to Principal, and to maintain a record of the same in the department.
- l) **To attend to the appeals as follows:**
 - i) To receive grievance/complaints in writing from the students regarding anomaly in award of grades
 - ii) To interact with the concerned course instructor and the student separately before taking the decision.
 - iii) The recommendations of the DC shall be communicated to the CoE for further appropriate action as required.
 - iv) To recommend suitable action against the concerned course instructor, if necessary.
- m) Any appropriate responsibility or function assigned by the Academic Council or the Chairman of the Academic Council or the BoS or the Chairman of the BoS.

14.2 Examination Malpractice Enquiry Committee:

Constitution:

1. Dean (Academic Affairs)-Chairman
2. Controller of Examinations - Member
3. Head of the Concerned Dept.- Member
4. Concerned DCI of that Session- Member
5. Member Sec., Academic Council- Member Convener

Functions:

- a) This committee shall meet and recommend penal action depending on the severity of the malpractice in examination related cases as per the provisions of “Examination Manual” of the college.
- b) The Principal shall take immediate action as per the approved Rules and the same shall be reported to the Academic Council / Governing Body.

14.3 Faculty Advisor:

The Faculty Advisor, appointed by the HOD, shall be assigned a specific number of students of the department that is offering the degree Programme and such students shall continue to be attached to the same faculty throughout their duration of study.

Functions (Highlights):

- a) To help the students in planning their courses and activities during study.
- b) To guide, advise and counsel the students on academic programme.

14.4 Course Instructor:

Functions (Highlights):

- a) He /She shall announce the blown-up syllabus, Abridged Lesson plan and details of evaluation pattern which includes distribution amongst various components of CIE within one week of beginning of semester.
- b) He/she will arrange to distribute a teaching plan and the evaluation plan together with the course objectives to all the students within the first week of each semester and submit a copy to DC.
- c) He/she shall follow all the Regulations related to teaching of a course and evaluation of students.
- d) He/she shall be responsible for all the records (answer books, attendance etc.,) of the students registered for the course.
- e) He/she shall conduct classes as prescribed in the Academic calendar and as per the teaching assignment time table issued by the HOD.
- f) He/she will prepare an evaluation plan showing details of evaluation of the student's performance in the course.
- g) He/she will properly document the students' performance

15.0. GRADUATION CEREMONY:

15.1. Graduation Requirements:

- a) A student shall be declared to be eligible for the award of the degree if he/she has
 - i) Fulfilled Degree Requirements in terms of earned credits.
 - ii) Completed satisfactorily mandatory learning and Humanity & Social Science Courses, bridge courses wherever applicable.
 - iii) No Dues to the College, Department, Hostel, Library Central Computer Centre and any other college facilities.
 - iv) No disciplinary action pending against him/her.

- b) The award of the degree must be recommended by the Academic Council and Governing Council.

15.2 Graduation:

- a) College may have its own annual Graduation Ceremony for the award of Provisional Degree to students completing the prescribed requirements of Academic programmes in each case, in consultation with the University and by following the provisions in the Statute. For the award of Prizes and Medals, the conditions stipulated by the Donor may be considered as per the statutes framed by the College for such awards.
- b) College may also institute Prizes and Awards to meritorious students, for being given away annually at the Graduation Ceremony. This would greatly encourage the students to strive for excellence in their academic work.
- c) Regulations Governing the Degree of Award of 'Honours' at B.E/B.Tech. Degree Programmes
Ref: VTU/BGM/OS-Aca/2020-21/369 dated: 03/06/2020
- AICTE has introduced a scheme wherein each student has to earn 18 or more additional credits through Massive Open Online Courses (MOOCs). VTU has initiated the award of Bachelor of Engineering/Technology degree with Honours from 2018-19 batch.

Short title, Applicability and Commencement

- These regulations shall be applicable to all B.E. Degree programmes being conducted by The National Institute of Engineering.

Eligibility Criteria for Registration

- Registration to 'Honours' qualification shall start from fifth semester onwards.
- The Registrants shall have obtained a grade $\geq D$ in all the courses in the first attempt only, in the semesters until this stage.
- The Registrants shall have obtained a CGPA ≥ 8.50 at the end of the fourth semester.
- The lateral entry Diploma students shall have completed the Basic mathematics & Applied mathematics – I during 3rd and 4th semesters in first attempt only.

Registration Procedure

- Any student meeting the eligibility criteria specified above and intending to register for the Honours qualification shall apply to the University through the Principal in the prescribed form along with the prescribed application fees within 15 working days after notification by the University.
- If registered, the students shall pay a one-time non-refundable registration fee as prescribed by the University to confirm the registration.

Additional Coursework

- In addition to the courses prescribed by the Institute to be completed successfully in the remaining semesters, that is, fifth to eight for the relevant degree award, each

student registered for the Honours qualification shall have to take up the coursework as notified by the university from NPTEL and other platforms and complete each coursework successfully irrespective of the number of attempts, with a final score (Online assignments: 25% + Proctored exam: 75%) leading to NPTEL Elite (60 to 75%) / Elite + Silver (76 to 89 %) / Elite-Gold (≥ 90 %) certificate, within the minimum prescribed duration for the award of degree.

- The University shall announce the BOS approved list of MOOCs (chosen from NPTEL/SWAYAM/other platforms)
- Students shall choose, online courses totaling to **18 or more credits** from the bouquet of approved online courses.
- Student shall select, in consultation with the concerned faculty advisor, the MOOCs such that the content/syllabus of them are not similar to that of the programmes first to eighth semesters core courses, professional electives or open electives that the student chooses at later semesters of the programmes.
- The students shall earn the credits by only appearing in person to the proctored examination conducted by NPTEL/SWAYAM/ other platform.
- The credit equivalence for online NPTEL courses shall be determined based on the following table.

Table: Assigned credits	
Online courses duration	Assigned credits
04 weeks	01
08 weeks	02
12 weeks	03

Award of Honours Qualification

- All the students who successfully complete the online courses as prescribed under 18UG HONRS 6.0 (VTU) and submit their certificates to the University through Principal against the notification issued by the Registrar (Evaluation) in time before closure of eighth semester as per calendar shall be eligible for the 'Honours' qualification.
- The Principals of the college under VTU shall submit the list of students who are eligible for the award of Honours degree along with the total credit earned by each student and the corresponding MOOC certificates to the University, programme wise, together with the CIE marks of 8th semester.

The list shall be validated by the Faculty Advisor of the students under consideration and endorsed by the Head/Chairperson of the department.

- Those students who cannot/do not submit the certificates on or before the last date prescribed by the University shall not be considered for the award of 'Honours' qualification irrespective of the number of credits earned by them. However they shall be awarded only B.E./B.Tech Degree.

- Students shall maintain a grade $\geq D$ in all the courses of fifth to eight semesters in first attempt only.
- Students failing to maintain a grade $\geq D$ in all the course of fifth to eight semesters in first attempt only shall discontinue the attempt to earn additional credits.
- Students not having CGPA ≥ 8.50 at the end of the programme shall not be eligible for the award of Honours even if they have satisfied the additional credits consideration prescribed for Honours degree.
- The Honours degree shall be awarded only if the CGPA at end of the B.E./B.Tech programme is equal to or greater than 8.50.
- Additional credits earned through NPTEL shall not be considered for CGPA of B.E./B.Tech. programme as well as rank declaration.

BLUEPRINT OF SYLLABUS STRUCTURE AND QUESTION PAPER PATTERN

Blue Print of Syllabus Structure

1. For 4 credit courses complete syllabus is prescribed in SIX Modules as Module 1, Module 2, etc.
2. For 3 credit courses complete syllabus is prescribed in FIVE Modules as Module 1, Module 2, etc.
3. For 2 credit courses complete syllabus is prescribed in THREE Modules as Module 1, Module 2 and Module 3.
4. In each module, there is one topic under the heading “**Self Learning Exercises**” (SLE). These are the topics to be learnt by the student on their own under the guidance of the course instructors. Course instructors will inform the students about the depth to which SLE components are to be studied. SLE will carry questions with a weightage of 10% in SEE only. No questions will be asked on SLE components in CIE.

Blue Print of Question Paper

1. For 4 Credit Courses

- i. Maximum Marks in SEE is 100 and duration of examination is 3 hours
- ii. Question paper will have **SIX** full questions. One full question each of 15 marks (Question No. 1, 2, 3, 4, 5 and 6) will be set from each module of the syllabus. Out of these six questions, two questions will have internal choice from the same module. The module from which choices are to be given is left to the discretion of the course instructor.
- iii. Question No. 7 will be set for 10 marks only on those topics prescribed as “**Self Learning Exercises**”.

2. For 3 Credit Courses

- i. Maximum Marks in SEE is 100 and duration of examination is 3 hours
- ii. Question paper will have **FIVE** full questions. One full question each of 18 marks (Question No. 1, 2, 3, 4 and 5) will be set from each module of the syllabus. Out of these five questions, two questions will have internal choice from the same module. The module from which choices are to be given is left to the discretion of the course instructor.
- iii. Question No. 6 will be set for 10 marks only on those topics prescribed as “**Self Learning Exercises**”.

3. For 2 Credit Courses

- i. Maximum Marks in SEE is 50 and duration of examination is 2 hours
- ii. Question paper will have **Three** full questions. One full question each of 15 marks (Question No. 1, 2 and 3) will be set from each module of the syllabus. Out of these three questions, one question will have internal choice from the same module. The module from which choice is to be given is left to the discretion of the course instructor.
- iii. Question No 4 will be set for 5 marks only on those topics prescribed as “**Self Learning Exercises**”.