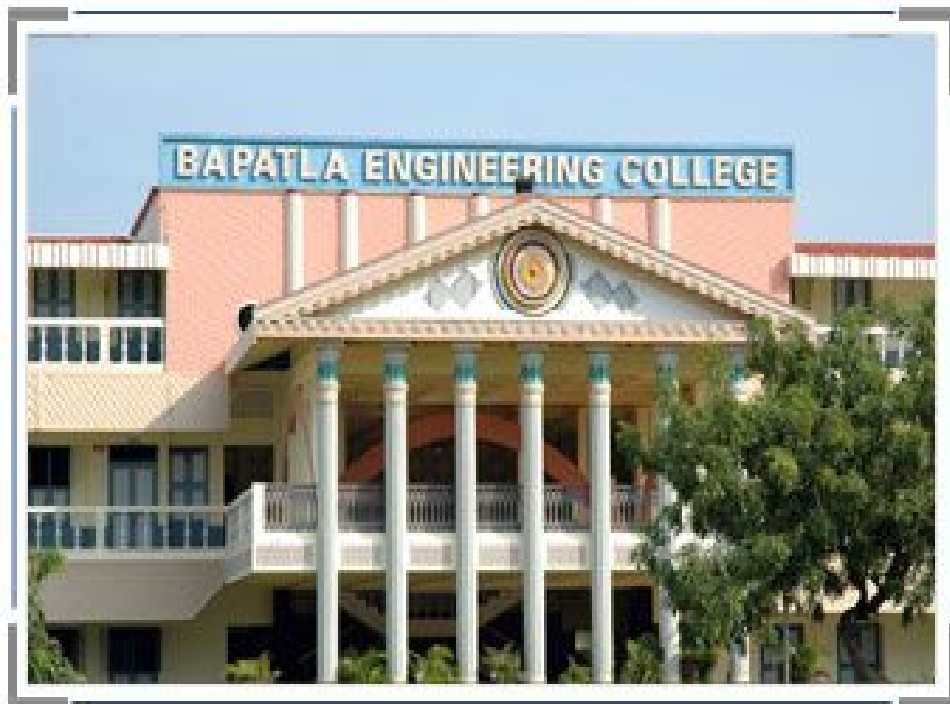


# ACADEMIC REGULATIONS

(w.e.f. 2010-2011)

B.Tech.



**BAPATLA ENGINEERING COLLEGE**

(Autonomous)

*(Affiliated to Acharya Nagarjuna University)*

(Sponsored by Bapatla Education Society)

BAPATLA-522101, Guntur District, A.P.

# Academic Rules & Regulations

*(Effective for students admitted into  
first year B.Tech.  
from the academic year 2010-2011).*

- 1.0 EXTENT: All the rules and regulations, specified herein after shall be read as a whole for the purpose of interpretation and when a doubt arises, the interpretation of the Chairman, Academic Council, Bapatla Engineering College (Autonomous) is final. As per the requirements of the Statutory Bodies, Principal, Bapatla Engineering College (Autonomous), shall be the Chairman of the College Academic Council.
- 2.0 ADMISSIONS:
  - 2.1 Admission to first year of any Four Year B.Tech Programmes of study in Engineering: Admissions into first year of B.Tech Programme of Bapatla Engineering College (Autonomous) (*Subsequently referred to as B.E.C*) will be as per the norms stipulated by Acharya Nagarjuna University & Govt. of Andhra Pradesh.
  - 2.2 Admission to the Second year of any Four year B.Tech Programme of study in Engineering: Admissions into second year of B.Tech Programme of B.E.C will be as per the norms stipulated by Acharya Nagarjuna University & Govt. of Andhra Pradesh.
  - 2.3 Admissions with advance standing: These may arise in the following cases:
    - 1) When a student seeks transfer from other colleges to B.E.C and desires to pursue study at B.E.C in an eligible branch of study.
    - 2) When students of B.E.C get transferred from one regulation to another regulation or from previous syllabus to revised syllabus.
    - 3) When a student after long discontinuity rejoins the college to complete his Programme of study for the award of a degree.
    - 4) When a student is not able to pursue his/her existing Programme of study but wishes to get transferred to another Programme of study.These admissions may be permitted by the Academic Council of B.E.C as per the norms stipulated by the statutory bodies and the Govt. of Andhra Pradesh. In all such cases for admission, when needed, permissions from the statutory bodies are to be obtained and the Programme of study at B.E.C will be governed by the transitory regulations given in 5.3.
- 3.0 DURATION OF THE PROGRAMME AND MEDIUM OF INSTRUCTION: The duration of the B.Tech. Programme is four academic years consisting of two semesters in each academic year. The medium of instruction and examination is English.
- 4.0 MINIMUM INSTRUCTION DAYS: Each semester shall consist of a minimum of 110 working days which includes instruction, term examinations and final examinations.
- 5.0 B.Tech. Programmes of study:
  - 5.1 The Four year B.Tech Programme is offered in the following branches of study:
    - 1) Biotechnology.
    - 2) Chemical Engineering.
    - 3) Civil Engineering.
    - 4) Computer Science & Engineering.
  
    - 5) Electrical & Electronics Engineering.
    - 6) Electronics & Communication Engineering.
    - 7) Electronics & Instrumentation Engineering.
    - 8) Information Technology.
    - 9) Mechanical Engineering.
  - 5.2 Structure of the Programme:

- 5.2.1 Each Programme of a Discipline or branch of study shall consist of:
- 1) General core courses in Basic Sciences, Engineering Sciences, Humanities, Mathematics and Management.
  - 2) Interdisciplinary courses in Engineering, to impart the fundamentals of Engineering to the student.
  - 3) Compulsory core courses to impart broad based knowledge needed in the concerned branch of study.
  - 4) Elective courses from either discipline or interdisciplinary areas to be taken by the student based on his/her interest and specialization preferred.
  - 5) A Term paper and a Project approved by the Department to be submitted in the fourth year of study.

Every Programme of study shall be designed to have 45-50 theory courses and 20-25 laboratory courses and the distribution of types of courses from the above is indicated in the following table.

General Core courses	20 -35%
Interdisciplinary courses in engineering	15-25%
Compulsory Core courses in the branch of study	45-55%
Elective Courses	10-15%

*Note: All components prescribed in the curriculum of any Programme of study shall be conducted and evaluated.*

5.2.2 Contact hours: Depending on the complexity and volume of the course the number of contact hours per week will be determined.

5.2.3 Credits: Credits are assigned to each course as per norms mentioned in the following table.

Subject	Credits
Theory Course (3 Theory Periods/Week)	03
Theory Course (More than 3 Theory Periods/Week)	04
Laboratory Course	02
Term paper	02
Final year Project	10

5.3 Transitory Regulations: For students admitted under advance standing (mentioned in 2.3) these transitory regulations will provide the *modus operandi*.

At the time of such admission, based on the Programme pursued (case by case)

- 1) Equivalent courses completed by the student are established by the BOS concerned.
- 2) Marks/Credits are transferred for all such equivalent courses and treated as successfully cleared in the Programme of study prescribed by B.E.C.
- 3) A Programme chart of residual courses not cleared will be derived and a Programme of study with duration specified will be prescribed for pursuit at B.E.C.
- 4) Marks obtained in the previous system if the case be, are converted to grades and CGPA is calculated.

All other modalities and regulations governing shall be the same as those applicable to the stream of students with whom such a candidate is merged.

- 5.4 Curriculum for each Programme of study:
- 1) The Four year curriculum of any B.Tech Programme of study in any branch of engineering is formulated based on the guidelines mentioned in 5.2 and will be recommended by the concerned Board of Studies and is approved by the Academic council of the college.
  - 2) In case of students admitted under lateral entry, the respective regular curriculum contents from second year onwards are to be pursued by them.
  - 3) In case of students admitted under advanced standing, the Programme curriculum will be prepared by the concerned Board of Studies and the Academic Council has to approve the same.
  - 4) After approval from the Academic Council, Programme curriculum for the same shall be prepared and made available to all the students along with the academic regulations.
- 5.5 The Maximum duration permitted and cancellation of admission:
- 5.5.1 The maximum duration permitted for any student to successfully complete any four year B.Tech. Programme of study shall be:
- 1) Eight academic years in sequence from the year of admission for a normal student admitted into first year of any Programme and
  - 2) Six academic years in sequence from the year of admission for a Lateral entry student admitted into second year of any Programme and
  - 3) For students admitted with advanced standing, the maximum time for completion of Programme study shall be twice the period in terms of academic years in sequence, stipulated in the Programme curriculum defined at the time of admission.
- 5.5.2 In case, any student fails to meet the applicable conditions for the eligibility of degree in the maximum stipulated period as in 5.5.1, his/her admission stands cancelled.

## 6.0 EXAMINATION SYSTEM & EVALUATION:

- 6.1 The performance of the students in each semester shall be assessed course wise. All assessments will be done on absolute mark basis. However, for the purpose of reporting the performance of a candidate, letter grades and grade points will be awarded as per section 11.0. The performance of a student in each course is assessed with assignment tests, term examinations on a continuous basis during the semester called Continuous Assessment (CA) and a Final Examination (FE) conducted at the end of the semester. For each theory, design and/or drawing course, there shall be a comprehensive Final Examination (FE) of three hours duration at the end of each Semester, except where stated otherwise in the detailed Scheme of Instruction.
- 6.2 The distribution of marks between Continuous Assessment(CA) and Final Examination(FE) to be conducted at the end of the semester will be as follows:

Nature of the course	CA	FE
Theory subjects	40	60
Drawing	40	60
Practicals	40	60
Term Paper	40	60
Project work	50	100

- 6.3 Continuous Assessment (CA) in Theory and Drawing subjects:
- 1) In each Semester there shall be two Term examinations and two Assignment Tests in every theory course. The duration of the Assignment Test shall be 45 minutes and that of the Term Examination shall be 90 minutes. Assignment sheets shall be given at least one week in advance of the commencement of the tests. Students shall

answer the question(s) [or question(s) similar in model] from the Assignment sheet stapled to or printed on the script which is distributed in the examination hall.

The Term Examination is conducted in the regular mode according to a schedule which will be common for a particular year of study. The maximum weightage for Term Examinations, Assignment Tests and the calculation of marks for CA in a theory course is given in the following table.

Weightage for different heads to calculate CA for 40 marks in a Theory course			
	Term Exams (Max. 20 marks)	Assignment Tests (Max. 15 marks)	Attendance (Max. 5 marks)
Better Performed test/exam	13	10	5
Other test/exam	7	5	

- 2) For drawing courses, there shall be only two Term examinations in a semester with no Assignment Tests. In case of such courses a maximum of 15 marks shall be given for day-to-day class work and a maximum of 20 marks shall be awarded to the Term examinations taking into account the performance of both the Term examinations giving weightage of 13 marks for the Term Examination in which the student scores more marks and the remaining 7 marks for the other term examination.
- 3) A maximum weightage of 5 marks will be given in the CA for attendance in all theory and drawing courses as indicated in 7.1.1.

#### 6.4 Final Examination (FE) in Theory and Drawing subjects:

- 1) For each theory, design and/or drawing course, there shall be a comprehensive Final Examination (FE) of three hours duration at the end of each Semester for 60 marks, except where stated otherwise in the detailed Scheme of Instruction. Question paper setting shall be entrusted to external examiners from the panels approved by the respective Boards of Studies.
- 2) A minimum of 24 marks (40%) are to be secured exclusively in the final examination (FE) of theory/drawing course and a minimum total of 40 marks in FE and CA put together in a theory / drawing course is to be secured in order to be declared as passed in that course and for the award of the grade in the course.

#### 6.5 Continuous Assessment (CA) in laboratory courses:

- 1) The evaluation for Laboratory course is based on CA & FE. The CA for 40 marks comprises of 20 marks for day to day laboratory work, 5 marks for record submission and 15 marks for a laboratory examination at the end of the semester.
- 2) In any semester, a minimum of 90 percent of prescribed number of experiments / exercises specified in the syllabi for laboratory course shall be taken up by the students. They shall complete these experiments / exercises in all respects and get the record certified by the concerned internal lab teacher and the Head of the Department to be eligible to appear for the Final Examination in that laboratory course.

#### 6.6 Final Examination (FE) in laboratory courses:

- 1) For each laboratory course, the final examination (FE) shall be conducted by one internal and one external examiner appointed by the Principal and the duration of the exam shall be for three hours. The FE is for 60 marks which include 30 marks for a lab experiment/exercise, 20 marks for Viva-voce and 10 marks for the certified record.

- 2) A minimum of 30 marks (50%) shall be obtained in FE and a minimum total of 40 marks in FE and CE put together in a laboratory course are to be secured in order to be declared as passed in the laboratory course and for the award of the grade in that laboratory course.

#### 6.7 Evaluation of term paper:

- 1) A term paper is to be submitted by each student in the 7<sup>th</sup> semester which would be a precursor to the project work to be done in the 8<sup>th</sup> semester. The evaluation is based on CA for 40 marks, which includes a minimum of two seminars/presentations for 20 marks and the report submitted at the end of the semester which is evaluated for 20 marks.
- 2) The final examination (FE) shall be conducted for 60 marks by one internal and one external examiner appointed by the Principal. The FE contains Viva-voce and the demonstration of the model developed or work performed as a part of the term paper.
- 3) A minimum of 30 marks (50%) shall be obtained in FE and a minimum total of 40 marks in FE and CE put together in the term paper are to be secured in order to be declared as passed in the term paper and for the award of the grade in the term paper.

#### 6.8 Evaluation of Project:

- 1) In case of the Project work, the evaluation shall be based on CA and FE. The CA for 50 marks consists of a minimum of two Seminars/ presentations for 25 marks and the Project Report submitted at the end of the semester which is evaluated for 25 marks.
- 2) FE shall be in the form of a Viva- voce and the demonstration of the thesis work for 100 marks. Viva-voce Examination in Project Work shall be conducted by one internal examiner and one external examiner to be appointed by the Principal. A minimum of 50 marks shall be obtained in FE exclusively and a minimum total of 60 marks in FE and CE put together are to be secured in order to be declared as passed in the Project and for the award of the grade.

- 6.9 A student who could not secure a minimum of 50% aggregate marks in CA of a semester is not eligible to appear for the Final Examinations conducted at the end of the semester and shall have to repeat that semester.

NOTE : A student who is absent for any Test / Exam / Seminar / Presentation as a part of Continuous Assessment (CA), for any reason whatsoever, shall be deemed to have scored zero marks in the respective component and no provision for make-up shall be provided.

### 7.0 ATTENDANCE REGULATIONS:

- 7.1 Regular course of study means a minimum average attendance of 75% in all the courses of study prescribed for a semester in the curriculum, computed by considering total number of hours / periods conducted in all courses as the denominator and the total number of hours / periods actually attended by the student in all courses, as the numerator.

- 7.1.1 A maximum of 5 marks weightage in CA in each theory/drawing course shall be given for those students who put in a minimum of 75% attendance in the respective theory/drawing course in a graded manner as indicated below:

Attendance of 75% and above but less than 80%	1 mark
Attendance of 80% and above but less than 85%	2 marks
Attendance of 85% and above but less than 90%	3 marks
Attendance of 90% and above	5 marks

7.2 Condonation of shortage in attendance may be recommended on genuine medical grounds, up to a maximum of 10% provided the student puts in at least 65% attendance as calculated in 7.1 above and provided the principal is satisfied with the genuineness of the reasons.

7.3 A student, who could not satisfy the minimum attendance requirements, as given above, in any semester, is not eligible to appear for the Final examinations and shall have to repeat that semester.

8.0 DETENTION: A student is said to have been detained and not allowed to appear for Final Examination(FE) at the end of the semester when

8.1 The student does not have a minimum 75% attendance or 65% attendance with condonation in all subjects put together in that semester or the student has not scored a minimum of 50% of marks in CA in all the courses of that semester put together.

Such a student shall have to repeat the same semester subsequently and satisfy the above requirements afresh to become eligible to appear for the Final Examination (FE), conducted at the end of the semester.

9.0 CONDITIONS FOR PROMOTION

9.1 A student not detained in the first semester of a year of study shall be promoted to second semester of that year of study.

9.2 A student shall be eligible for promotion to II year of B.Tech. Programme if he/she is not detained in the second semester of first year B.Tech. Programme irrespective of the number of backlog courses in I year B.Tech.

9.3 A student shall be eligible for promotion to III year of B.Tech. Programme if he/she is not detained in the second semester of II year B.Tech. Programme and has passed all but three courses of I year B.Tech. (including laboratory course).

9.4 A student shall be eligible for promotion to IV year of B.Tech. Programme if he/she is not detained in the second semester of III year B.Tech. Programme and has passed all but three courses of II B.Tech. (including laboratory course) and all but one course of I B.Tech. (including laboratory course).

10.0 Registration: Every eligible student (not detained and promoted) has to register himself /herself at the beginning of every semester indicating all the Courses taken up for pursuit by him/her during that Semester.

10.1 When a student is debarred for one or more semesters, his/her registration in the present semester is cancelled and the student is debarred from registering in future during the debarred period.

10.2 In any case while re registering in any semester, he or she will have to pay the requisite fee once again.

11.0 GRADING SYSTEM

11.1 Based on the student performance during a given semester, a final letter grade will be awarded at the end of the semester for each course. The letter grades and the corresponding grade points are as given in the Table.

Table: Grades & Grade Points

Grade	Grade points	% of Marks
O	10	90% and above
A+	9	80% – 89%
A	8	70% – 79%
B+	7	60% – 69%
B	6	50% – 59%
C	5	40% – 49%
F	Failed, 0	Less than 40%

11.2 A student who earns a minimum of 5 grade points (C grade) in a course is declared to have successfully completed the course, and is deemed to have earned the credits

assigned to that course. However it should be noted that a pass in any course/term paper/Project shall be governed by the rules mentioned in 6.0.

## 12.0 GRADE POINT AVERAGE

12.1 The Grade Point Average (GPA) will be calculated according to the formula:

$$GPA = \frac{\sum C_i G_i}{\sum C_i}$$

Where  $C_i$  = number of credits for the course  $i$ ,

$G_i$  = grade points obtained by the student in the course.

12.2 Semester Grade Point Average (SGPA) is awarded to candidates considering all the courses of the semester. Zero grade points are also included in this computation.

12.3 To arrive at Cumulative Grade Point Average (CGPA), the formula is used considering the student's performance in all the courses taken in all the semesters completed up to the particular point of time.

13.0 ELIGIBILITY FOR AWARD OF B.TECH. DEGREE: A student shall be eligible for award of the B.Tech degree if he/she fulfils all the following conditions;

- 1) Registered and successfully completed all the components prescribed in the Programme of study to which he/she is admitted,
- 2) Obtained CGPA greater than or equal to 5.0 (Minimum requirements for Pass),
- 3) Has no dues to the Institute, hostels, Libraries, NCC/NSS etc., and
- 4) No disciplinary action is pending against him/her.

14.0 AWARD OF CLASS: A candidate who becomes eligible for the award of B.Tech. Degree shall be placed in one of the following Classes based on CGPA.

Table: CGPA required for award of Degree

Distinction	$\geq 8.0^*$
First Class	$\geq 7.0$
Second Class	$\geq 6.0$
Pass	$\geq 5.0$

\* In addition to the required CGPA of 8.0, the student must have necessarily passed all the courses of every semester in the minimum stipulated period for the Programme.

14.1 Grade Sheet: A grade sheet (Memorandum) will be issued to each student indicating his performance in all courses taken in that semester and also indicating the Grades and SGPA.

14.2 Transcripts: After successful completion of the total Programme of study, a Transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee. Partial transcript will also be issued up to any point of study to any student on request and by paying the stipulated fee in force.

14.3 Candidates shall be permitted to apply for recounting/revaluation of FE scripts within the stipulated period with payment of prescribed fee.

14.4 The Governing body of B.E.C (Autonomous) has to approve and recommend to the Acharya Nagarjuna University for the award of a degree to any student.

## 15.0 IMPROVEMENT OF CLASS:



- 15.1 A candidate, after becoming eligible for the award of the Degree, may reappear for the Final Examination in any of the theory courses as and when conducted, for the purpose of improving the aggregate and the class. But this reappearance shall be within a period of two academic years after becoming eligible for the award of the Degree. However, this facility shall not be availed of by a candidate who has taken the Original Degree Certificate. Candidates shall not be permitted to reappear either for CA in any course or for Final Examinations (FE) in laboratory courses (including Project Viva-voce) for the purpose of improvement.
- 16.0 SUPPLEMENTARY EXAMINATIONS: In addition to the Regular Final Examinations held at the end of each semester, Supplementary Final Examinations will be conducted during the academic year. Candidates taking the Regular / Supplementary examinations as Supplementary candidates may have to take more than one Final Examination per day. A student can appear for any number of supplementary examinations till he/she clears all courses which he/she could not clear in the first attempt. However the maximum stipulated period cannot be relaxed under any circumstances.
- 17.0 INSTANT SUPPLEMENTARY EXAMINATIONS: Candidates who fail in one theory course of 4<sup>th</sup> year 2<sup>nd</sup> semester can appear for Instant Supplementary Examination conducted after declaration of the revaluation results of the said exam.
- 18.0 MALPRACTICES:  
The Principal shall refer the cases of malpractices in Continuous Assessments (CA) and Final Examinations (FE) to an Enquiry Committee constituted by him / her. The Committee will submit a report on the malpractice committed by the student to the Principal. The Principal along with the members of the Committee is authorised to award a suitable punishment.
- 19.0 ADDITIONAL ACADEMIC REGULATIONS:  
19.1 Any attempt to impress upon the teachers, examiners, faculty and staff of Examinations, bribing for either marks or attendance will be treated as malpractice.  
19.2 When a student is absent for final examination, he/she is treated as to have appeared and obtained zero marks in that component and Grading is done so.  
19.3 When a component of Continuous Assessment (CA) or Final Examination (FE) is cancelled as a penalty, he/she is awarded zero marks in that component.
- 20.0 AMENDMENTS TO REGULATIONS:  
The Academic Council of Bapatla Engineering College (Autonomous) reserves the right to revise, amend or change the Regulations, Schemes of Examinations, and/ or Syllabi or any other matter pertained suitable to the needs of the students, society, industry without any notice.

\* \* \*