ACADEMIC REGULATIONS FOR B. TECH PROGRAM

Applicable for students admitted from 2013-2014





Vaddeswaram – 522 502 (A.P) INDIA

Note: While every effort has been made to ensure that this book is accurate and up to date, it may include typographical or other errors. Changes are periodically made to this publication and will be incorporated in new editions.

ACADEMIC REGULATIONS FOR B.TECH. PROGRAM

(Applicable for students admitted from 2013-2014)

This document supplements the University's rules and regulations to provide assistance to all B.Tech students. It is required that every individual has to abide by these regulations.

TERMINOLOGY

Academic Council: The Academic Council is the highest academic body of the University and is responsible for the maintenance of standards of instruction, education and examination within the University. Academic Council is an authority as per UGC regulations and it has the right to take decisions on all academic matters including academic research.

Academic Year: It is the period necessary to complete an actual course of study within a year. It comprises of two consecutive semesters i.e., Even and Odd semester.

Audited Course: It is a course of study which neither has evaluation component nor a grade.

Backlog Course: A course is considered to be a backlog course if the student has obtained a failure grade (F).

Basic Sciences : The courses of foundational nature in the areas of Mathematics, Physics, Chemistry, Biology etc., are offered in this category.

Betterment : Betterment is a way that contributes towards improving the students' grade in any course(s). It can be done by either (a) re-appearing or (b) re-registering for the course.

Board of Studies : Board of Studies (BOS) is an authority as defined in UGC regulations, constituted by Vice Chancellor for each of the department separately. They are responsible for curriculum design and update in respect of all the programs offered by a department.

Branch of Study: It is a branch of knowledge, an area of study or a specific program (like Civil Engineering, Mechanical Engineering, Electrical and Electronics Engineering etc.)

Certificate course : It is a course that makes a student gain hands-on expertise and skills required for holistic development. It is a mandatory, non-credited course for the award of degree.

Change of Branch : Change of branch means transfer from one's branch of study to other.

Compulsory course : Course required to be undertaken for the award of the degree as per the program.

Course : A course is a subject offered by the University for learning in a particular semester.

Course Handout : Course Handout is a document, which gives complete plan of the course. It contains the details of the course viz. Course title, Course code, Pre-requisite, Credit structure, team of instructors, Course objectives, Course rationale, Course Outcomes and the relevant syllabus, textbook(s) and reference books, Course delivery plan and session plan, evaluation method, chamber consultation hour, course notices and other course related aspects. In essence, course handout is an agreement between students (learners) and the instructor.

Course Outcomes : The essential skills that need to be acquired by every student through a course.

Credit : A credit is a unit that gives weight to the value, level or time requirements of an academic course. The number of 'Contact Hours' in a week of a particular course determines its credit value. One credit is equivalent to one lecture hour per week or two hours per week of tutorials/ self-learning/ practical/ field work during a semester.

Credit point : It is the product of grade point and number of credits for a course.

Credit Transfer : The procedure of granting credit(s) to a student for course(s) undertaken at another institution.

Cumulative Grade Point Average (CGPA) : It is a measure of cumulative performance of a student over all the completed semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

Curriculum : Curriculum incorporates the planned interaction of students with instructional content, materials, resources, and processes for evaluating the attainment of Program Educational Objectives.

Degree : A student who fulfills all the Program requirements is eligible to receive a degree.

Degree with Specialization : A student who fulfills all the Program requirements of her/his discipline and successfully completes a specified set of Professional elective courses in a specialized area is eligible to receive a degree with specialization.

Department : An academic entity that conducts relevant curricular and co-curricular activities, involving both teaching and non-teaching staff and other resources.

Detention in a course : Student who does not obtain minimum prescribed marks in continuous insemester evaluation and /or minimum prescribed attendance in a course shall be detained in that particular course.

Dropping from the Semester : A student who doesn't want to register for the semester should do so in writing in a prescribed format before commencement of the semester.

Elective Course : A course that can be chosen from a set of courses. An elective can be Professional Elective, Open Elective, Management Elective and Humanities Elective.

Engineering Sciences : The courses belonging to basic evolutionary aspects of engineering from Mechanical Sciences, Electrical Sciences and Computing like Engineering Mechanics, Data structures, Network Theory, Signal Analysis etc...

Evaluation : Evaluation is the process of judging the academic work done by the student in her/his courses. It is done through a combination of continuous in-semester assessment and semester end examinations.

Grade : It is an index of the performance of the students in a said course. Grades are denoted by alphabets.

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

Honors Degree

A student who fulfills the entire Program requirements of her/his discipline and successfully completes a specified set of additional courses within the same program is eligible to receive an Honors degree.

Humanities Elective : A course offered in the area of Liberal Arts.

Industrial Training : Training program undergone by the student as per the academic requirement in any company/firm. It is a credited course.

Industrial Visit : Visit to a company/firm as per the academic requirement.

In-Semester Evaluation : Summative assessments used to evaluate student learning, acquired skills, and academic attainment during a course.

Make-up Test : An additional test scheduled on a date other than the originally scheduled date.

Management elective: A course that develops managerial skills and inculcates entrepreneurial skills. **Mini project :** Mini Project is a credit-based course that a student has to undergo during his/her academic term, which involves the student to explore in a discipline belonging to their research interest within their program area. **Minor Degree :** A student who fulfills all the Program requirements of her/his discipline and successfully completes a specified set of courses from another discipline is eligible to receive a minor degree in that discipline.

Multi- Section Course : Course taught for more than one section.

Open Elective : This is a course of interdisciplinary nature. It is offered across the University for all programs.

Over loading : Registering for more number of credits than normally prescribed by the Program in a semester.

Practice School : It is a part of the total program and takes one full semester in a professional location, where the students and the faculty get involved in finding solutions to real-world problems. A student can choose Project/Practice School during his/her 7th or 8th semester of his/her Academic Year to meet the final requirements for a degree.

Pre-requisite : A course, the knowledge of which is required for registration into higher level course.

Professional Core : The courses that are essential constituents of each engineering discipline are categorized as Professional Core courses for that discipline.

Professional Elective : A course that is discipline centric. An appropriate choice of minimum number of such electives as specified in the program will lead to a degree with specialization.

Program : A set of courses offered by the Department. A student can opt and complete the stipulated minimum credits to qualify for the award of a degree in that Program.

Program Educational Objectives : The broad career, professional, personal goals that every student will achieve through a strategic and sequential action plan.

Project: Course that a student has to undergo during his/her final year which involves the student to undertake a research or design, which is carefully planned to achieve a particular aim. It is a credit based course.

Project based laboratory : Project Based Laboratory is a student-centric learning methodology that involve students in design, problem-solving, decision making, and investigative activities; gives students the opportunity to work in teams, over extended periods of time; and culminate in realistic products or presentations

Re-Appearing : A student can reappear only in the semester end examination for the Theory component of a course, subject to the regulations contained herein.

Registration : Process of enrolling into a set of courses in a semester/ term of the Program.

Re-Registering : A student desiring to repeat a course is permitted to do so, subject to the regulations contained herein.

Semester : It is a period of study consisting of 15 to 18 weeks of academic work equivalent to normally 90 working days including examination and preparation holidays. The odd Semester starts normally in July and even semester in December.

Semester End Examinations : It is an examination conducted at the end of a course of study.

Single Section Course : Course taught for a single section.

Social Service : An activity designed to promote *social* awareness and generate well-being; to improve the life and living conditions of the society.

Student Outcomes : The essential skill sets that need to be acquired by every student during her/his program of study. These skill sets are in the areas of employability, entrepreneurial, social and behavioral.

Substitution of Elective course : Replacing an elective course with another elective course as opted by the student.

Summer term : The term during which courses are offered from May to July. Summer term is not a student right and will be offered at the discretion of the University.

Term Paper : A 'term paper' is a research report written by students that evolves their course based knowledge, accounting for a grade. Term paper is a written original research work discussing a topic in detail. It is a credit based course.

Under-loading : Registering for lesser number of credits than normally prescribed by the Program in a semester.

Withdraw from a Course : Withdrawing from a Course means that a student can drop from a course within the first two weeks of the odd or even Semester (deadlines are different for summer sessions). However s/he can choose a substitute course in place of it by exercising the option within 5 working days from the date of withdrawal.

Degrees:

A student enrolling into the B.Tech Programs offered by various departments are eligible for the following degrees:

a) B.Tech degree in the respective departments (A general degree, obtained by taking courses offered by the department, and Five Professional Electives ; within from various Groups offered by the department, and taking up a Practice School / Project in his/ her chosen area within the domain of the department)

b) B.Tech degree with Specialization in domains (A degree, obtained by taking courses offered by the department, and taking the Five Professional Electives chosen from within the Specialized Streams offered by the department, and along with it taking up Practice School / Project preferably falling in the domain of the chosen Specialization only)

c) B.Tech Honors Degree: This is a flexibility offered only for the elite students of the Program, who opts for it and take up additional courses that foster their domain knowledge which are over and above the courses minimum required for any student to get a regular B.Tech degree. This degree will also be offered only within a duration of 4 years, and in between such students should not have any discontinuities in terms of Re-registrations, back logs, failures, detentions etc in any one the courses registered by them.

d) Dual Degree: A B.Tech student can opt for a dual degree either in M.Tech or M.B.A at the end of 4th Semester. The required courses to be done and the program structure to obtain Dual degree in a minimum period of 5 years will be supplemented by the respective departments. At the end of four years the student will get his normal degree and after successful completion of 5 years the M.Tech./MBA degree will be awarded.

RULES AND REGULATIONS

This document supplements the University's rules and regulations to provide assistance to all undergraduate students. It is the responsibility of the student to comply with it, as it is the rule and the requirements of the University for the Conferment of degrees.

1.0 INTRODUCTION

K.L University will confer B. Tech degree to candidates who are admitted to the Bachelor of Technology (B. Tech) Programs and fulfill all the requirements for the award of the degree. The University offers four year full time programmes in specialized engineering disciplines that address the immediate national requirements by providing adequately trained manpower.

2.0 DETAILS OF B.TECH PROGRAMS ON OFFER

2.1 Department wise list of programs offered

The disciplines in which the courses of study are available and degrees will be offered at undergraduate (B. Tech) level are:

- 1. Biotechnology (BT)
- 2. Civil Engineering (CE)
- 3. Computer Science & Engineering (CSE)
- 4. Electronics and Communication Engineering (ECE)
- 5. Electrical and Electronics Engineering (EEE)
- 6. Electronics and Computer Engineering (ECM)
- 7. Mechanical Engineering (ME)

2.2 UG Engineering programs with Specialization

University offers courses for engineering program with specialization that are to be chosen by the students as part of their UG Engineering specialization program of:

- a) The University permits a student to register for a minimum 5 specialization elective courses. A student will be awarded Degree with Specialization if she / he complete 5 courses of his choice from a particular stream within the discipline. However he has to do his project preferably in the particular domain of his/her chosen.
- b) In situations where a student completes courses of two different specialization streams, he/she will be awarded the degree with specialization (optional) in any one stream of his/her choice, for which they need to make a representation to the concerned HOD at the end of 7th semester.

2.3 UG Engineering programs with a Minor in different discipline

- a) A student who completes all the B. Tech requirements of one discipline for which he/she is admitted (or took transfer of branch), is awarded with Major degree in that discipline. The University offers flexibility for a student to complete a smaller set of courses from another discipline and awards him/her a minor degree in a different discipline.
- b) For obtaining minor degree the student must complete 5 additional courses from the regular curriculum of his/her desired domain and as stipulated by the relevant BOS.
- c) In situations where a student completes courses of two different minor degree programs by overloading himself or by attending summer term programs, he will be awarded with a minor degree in any single stream of his choice. However the courses successfully completed by him will be listed in the transcript.

d) Such students will be awarded only one degree by specifying the minor area they have done (Optional).

2.4 UG Engineering Program with Honors

The Honors programme is for those who wish to do more in their major branch of engineering. It is also recognition of excellence in that field of engineering. Thus, in order to earn the Honors in the major field of engineering, a student has to do 5 extra courses by overloading themselves and earn additional credits through course work in topics related to the major discipline and also maintain a Cumulative Grade Point Average (CGPA) of 8.5 or higher at the levels of Entry & Exit.

A student having a CGPA of 8.5 or higher at the end of 4th semester can start taking additional course towards the Honors' programme. However if the aspirants are more than 10% in each programme opportunity will be provided on merit basis to the top 10%. Extra 5 courses done in specified focused areas will thus lead to earning an Honor in one's own discipline.

Starting from the fifth semester, students who have opted for Honors are permitted to take one or two courses in every semester, in addition to the prescribed courses for their degree and as mentioned earlier, it is subjected to offering of the course by the University. A student has to pre-register for the course, which she/he intends to take towards the end of the semester and seats will be allotted based on the academic performance of the student towards the basic requirement of his/her, degree. A student has to enter this extra course too in the course registration form, when permitted. One should note that there is no separate registration for Honors.

In any semester, a student cannot register for only those courses which form part of her/his additional learning component. There should at least be one course component that is specified as the minimum requirement of the degree. Moreover, a student cannot overstay in the programme once the minimum requirements prescribed for the degree are completed.

3.0 ELIGIBILITY CRITERIA FOR REGISTERING INTO UG ENGINEERING PROGRAMS

Admission to the University is open to qualified young men and women. Candidates seeking admission to the first semester of the eight semesters B. Tech. Degree Programme should have passed the Intermediate Examination (10 +2) (Higher Secondary) of program of study with 60% of marks in Mathematics, Physics, and Chemistry in the case of Engineering programmes and Mathematics/Biology, Physics, and Chemistry in the case of Bio-Technology programmes approved by the Government of Andhra Pradesh

(AND / OR)

Should have passed the engineering entrance examination i.e., EAMCET, or AIEEE, or JEE (MAIN), or KLUEEE

(AND / OR)

To enter into the 3rd semester of B-Tech engineering programme directly, the students should possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Andhra Pradesh (SBTET)

For foreign students who wish to study at the University, please refer to the "Foreign Student Admission Procedures" stated separately and comply with the study requirements of the Ministry of Education.

Transferees are accepted only if there are allotted slots in any departments. Should there be allotted slots, a transferee examination will be conducted for the enrollment of transfer students. Take note that a transferee must at least finish one full school year at his/her previous University and cannot transfer to the University if in his/her final year of study.

4.0 UG PROGRAM CURRICULUM DESIGN

For an academic programme the curriculum is the basic framework that will stipulate the credits, category, course code, course title, course delivery (Lectures / Tutorials / Lab / Project), in the credit based system

4.1 Program Structure

- a) Each Academic Year is divided into two semesters, each of, approximately, 18 weeks duration:
 - Odd Semester (July December)
 - Even Semester (January May). (Summer Term (May – July))
- b) All courses are categorized into three streams even, odd and dual semester courses.
- c) Even semester courses are offered only during even semester i.e., January-May, Odd semester courses are offered only during odd semester i.e., July-December and dual semester courses are offered during both even & odd semesters.
- d) Summer Term starts around the middle of May and ends around first week of July.
- e) A Program is a set of courses offered by the University that a student can opt and complete certain credits to qualify for the award of a degree. First year courses are divided into two semesters. Students have independency to choose courses of their own choice prescribed by the University, subject to the maximum permissible limit in each course as specified by the University from time to time.
- f) From second year onwards a student can register for a maximum of 24 credits or 7 credit courses(whichever is less) per semester (except while doing project work/practice school/Minor degree/Honors degree/Integrated program) of his/her choice from his entire curriculum, subject to the fulfillment of pre-requisites as defined for each course.
- g) A student can choose project/practice school only during 7th or 8th semester.

4.2 Course Structure

a) All courses have a Lecture/Tutorial/Experiment/Design component (L-T-P) to indicate the contact hours. 'T' and 'P' components of a course may be void. Separate pure Laboratory course (0-0-P) may also be provided. All courses have a credit count.

Teaching of courses would be reckoned in terms of credits. Every course has a list of courses (may be void) in certain cases as its pre-requisite.

- b) For calculating credit, in general each lecture and tutorial hour per week will be considered as one credit and two practical hours as one credit. Project work will be treated as equivalent to twelve credits and Practice school will be treated as equivalent to twelve credits.
- c) However, in situations where calculated value of credit is a fraction, it is rounded to the next number.
- d) The curriculum for all the programmes in the first year shall be common for all disciplines (except Bio-Technology). However, slight deviations are permitted with prior approval from Board of Studies and Academic Council.
- e) For all the Professional Core Courses, offered by various departments, the students have to necessarily undertake a Lab Course along with a Group based Project task, which must be allotted by the Course Coordinator and the Team of Instructors, ensuring the topic for each Group of students to be covering all major portions of the course. This is for making the students gain more Practical exposure / hands on, on the Core Courses and thus making them well versed and potentially strong in fundamentals of their respective departments.

4.3 Course Precedence

- a) A student who has qualified in all the courses in the pre-requisite would be allowed to register in the course.
- b) In any course if a student appears for final exam or is successfully promoted (through internals etc.) deemed to have met the prerequisite for next higher level course.
- c) The Dean Academics after consulting with Department concerned has the prerogative to waive the prerequisite (if it is satisfied through a test) if the student has gained sufficient proficiency to take up the course.

4.4 Specialization through Elective Courses

- a) If a student chooses any course outside the compulsory courses prescribed by the department is known as elective course.
- b) The student is permitted to choose the elective courses of his/her choice within his/her own discipline.
- c) The University offers five types of electives:
 - (i) Specialization elective: An elective course offered by the Department for the fulfillment of degree with specialization is known as specialization elective.
 - (ii) University/open elective: A course which is of interdisciplinary nature having no prerequisites is known as University elective. B. Tech degree student can register for these courses during 5th semester or later.

- (iii) Management elective: An elective course offered to encourage managerial skills and to inculcate entrepreneurship skills for an undergraduate student is known as management elective. Management elective courses are offered at institutional level and are different from electives of management group.
- (iv) Professional Core Elective: Professional Core Elective course is deemed essential for an academic degree consists of all core courses that considered being essential and consisting of the required core courses to meet a graduation requirement for a student. A student can register for these courses from 3rd year onwards.
- (v) Humanities and Science Elective: The Humanities and Sciences elective offer a variety of academic choices for all students working toward an undergraduate Engineering degree. It is designed to provide the students with social, cultural, political and economic background crucial to fulfilling the College of Engineering's purpose of "preparing our graduates to begin a lifetime of technical and professional creativity and leadership in their chosen field". Students are responsible for determining their qualification for taking an H&S course, not limited to pre-requisites.
- d) Specialization electives, discipline electives and compulsory discipline courses can be chosen by the students of the respective disciplines only. However, the students of a particular discipline can register for specialization/ discipline / interdisciplinary minor / compulsory discipline courses of other disciplines provided they have met the pre requisite or when pre requisite is waived by Dean Academics.
- e) A student is not permitted to choose an open elective, if he has already done that course as a part of regular programme (or) a student is not permitted to choose an open elective course, if it covers more than 30% of content already done by him under regular programme.
- f) An elective course is offered, only if there are a minimum 20 number of students registered for it.
- g) A student shall take up minimum two certificate courses related to advanced topics/ areas as offered by their Department.

4.5 Summer Term and Evening Courses

The University may offer summer term and evening courses, as per the necessity from time to time. The course to be run during summer shall be decided on the basis of essential deficiencies made by group of students. Following conditions apply for students registering for summer term and evening courses.

- (a) Students falling in any one of the following categories can register for summer term and evening courses, provided they have completed prerequisites for the courses offered:
 - (i) Who have been allowed semester withdrawal on medical grounds
 - (ii) Who have failed in the subjects in a regular semester (OR)
 - (iii) Who have taken lesser load on advice/by choice (OR)

- (iv) Whose earned credits have fallen below the credits earned by a regular student of the same programme for some reason and who has taken courses as per advice of his/her faculty.
- (b) A student can register only for a maximum of three courses in each summer term. Students registering for more than 1 summer course have to ensure that there is no clash in the time table. In case of clash immediately they have to approach Director, Registrations/Dean-Academics for time table adjustment. If the time table does not permit the fee paid by them will be refunded.
- (c) For students who would like to register for evening courses can do so only if the timings do not clash with regular course work and the registration of such students is subjected to the approval of Dean-Academics.
- (d) Any student who is registering for summer term or evening courses has to pay Requisite fee prescribed by the University.
- (e) Summer course/evening course is not a student right and will be offered based on availability of faculty and other institute resources. If the course is not offered the fees paid will be refunded in to-to.

5.0 EVALUATION OF UG PROGRAMS

- A student's academic progress is examined according to any one or combination of the following methods as decided by the Course Coordinator.
- Home Assignments and Assignment tests given by the faculty during the course of study
- Periodic internal Tests
- Quizzes
- Mid- Semester examinations in the middle of each semester
- Semester Project Report assigned by faculty upon requirement
- Final end examinations given at the end of the semester
- a) The Mid-Semester and the End-semester examinations in respect of theory courses will be conducted centrally by the examination section as per the schedule.
- b) Appearing in the end-semester examination in the theory and laboratory subjects is mandatory for a student.
- c) Students will be permitted to appear in the examinations in only those subjects for which they have registered either for study or for Examination at the beginning of the semester.
- d) Attending the Co-curricular activities like Seminars, Group discussion, Colloquia etc., are mandatory.
- e) Supplementary examinations for the benefit of fail/detained/summer term students will be held only once in a year immediately after summer term classes.

f) Students may have to take more than one examination in a day either during regular/supplementary examination.

5.1 Internal evaluation

- a) The process of evaluation should be continuous throughout the semester and involves components as decided by the course coordinator such as session tests, quizzes, surprise quiz, case analysis, assignments, attendance, Home assignments, open book tests, Seminars, project, term papers and practical examination constituting a total weightage of 40% of total marks.
- b) The distribution of weightage will be decided and announced by the course coordinator, towards the beginning of the course, so that students are aware of the evaluation mechanism to be followed in the course.
- c) The Course Coordinator will display solution key on the notice board and in e-learning site immediately after the evaluation component with evaluation scheme.
- d) In order to maintain transparency in evaluation, the test and quiz answer sheets **including end exam will be shown to the students** within one week of conducting the exam. If a student is not convinced with the marks awarded he/she can request the course coordinator to re-check on request.

| e) | No correction is permitted once the course coordinator submits the marks/grades to the |
|----|--|
| | controller of examination. |

| | DISTRIBUTION OF WEIGHTAGE | | | | |
|----------|--------------------------------|------------|--|---|--|
| S. No | Nature of examination | Marks % | Type of examination and mode of Assessment | Scheme of examination | |
| | 60 Semester end examination | | | This examination question paper in theory subjects will be for a maximum of 60 marks. | |
| 1 | *Theory | 40 | The distribution of weightage should be decided and announced by the course coordinator (compulsory towards the beginning of the course). | 5 marks for attendance and for the balance marks, the scheme of examination & evaluation procedure should be decided and announced by the course coordinator (towards the beginning of the course). | |
| 2 | *Practical | 50 | Semester – end Lab examination | 50 marks are allotted for semester end laboratory/drawing examination. The examination pattern will be decided by the course coordinator in consultation with Group Head. | |
| | | 50 | The distribution of weightage should be decided and announced by the course coordinator | Based on Projects submitted | |

| 3 | Mini Project / Industrial Training Term paper | 100 | The distribution of weightage should be decided and announced by the course coordinator | |
|---|--|-----|--|--|
| | Final year Project | | 50 marks for External evaluation | |
| 4 | | 100 | The distribution of weightage should be decided & announced by course coordinator | Semester end Project Examination. |
| | Practice School | 100 | The distribution of weightage should be decided by authorities of Practice School. | Fortnightly progress reports, interim evaluation and final evaluation. |

***Note-1:** 1. for pure Theory & pure Lab courses follow the above evaluation.

2. For Combined Theory & Lab courses follow the proportion rule as given below. 3-0-2 nature Theory Credits & Lab Credits are in 3:1 ratio. Hence the Internal marks evaluated for Theory & Lab as above to be divided in the ratio 3:1 and clubbed.

3-1-2 nature Theory & Lab credits are in 4:1 ratio. Hence the Internal marks evaluated for Theory & Lab as above to be divided in the ratio 4:1 and clubbed.

5.2 Comprehensive evaluation

- (1) All regular courses will be evaluated as per the L-T-P structure and graded as shown table 5.4B.
- (2) All audited courses are evaluated and awarded satisfactory/not satisfactory grade. In case of award of non-satisfactory the student has to reappear the end comprehensive examination
- (3) For non credit courses as per the L-T-P structure grading will be done and grades are awarded as X, A, B, C, D, E or F. In case of F grade the student has to re-appear the end Comprehensive examination

5.3 Betterment

- a) A student may reappear for end comprehensive examination (theory part only) for improving the grade in any course/courses, through betterment subject to the following conditions:
 - The student has obtained the lowest pass grades in the course concerned, and
 - For improvement, their CGPA shall be ≤ 6.75. In the case of reappearing, the grade obtained in reappearance or the earlier grade whichever is better will be considered.
- b) A Student having D or E grade and CGPA less than 6.75 can Re-register in a course at any time before the completion of his graduation program provided the University facility permits. However, a student who secured CGPA less than 5 should obtain prior permission of Dean-Academics, before he / she Re-registers for a course.

- c) For Re-registering to a course / reappearing for comprehensive examination, the student has to pay the pre-requisite fee as prescribed by the University.
- A student cannot Re-register/reappear for comprehensive examination in courses like Professional Practice in Industries, summer internship, courses having course Structure 0-0-P, Mini Project, Project Work, Practice School/Term Paper or any other courses which are conducted as vocational courses.
- e) A student who has completed the formalities of graduation cannot Re-register a course / reappear for evaluation components.
- f) A student Re-registering for comprehensive examination for improving the grade must ensure that the dates of evaluation components do not clash with any of his courses in the regular semester is not permitted to Re-register for comprehensive examination
- g) Director (Registration) can counsel the student in Academic Counseling Board (ACB) to Re-register a course for evaluation components to improve his/her grade so that he/she can come out of ACB purview. However, decision taken by the student in this regard shall be final. Student who is advised to Re-register a course / semester does not extend his/her graduation period.
- h) In case of Re-registration for betterment he/she is exempted from attending the course and the marks obtained by the student for attendance earlier for that course will be carried forward.
- i) A student repeating a course after obtaining NA report has to attend all the classes
- j) Further the student has to attend all the evaluation components and ensure that the dates don't clash with any of his regular course.
- k) The grade obtained by the student while repeating will be final and in no case the grade obtained in previous attempt will be considered.
- I) However such an improvement is not considered for the award of Rank or Gold medal.

Re-appearing with Registration:

A student can repeat a course by re-registering for two reasons:

- i) To improve the grade i.e. betterment
- ii) When he/she is detained in a course.

*Repeating a course implies that the student will re-register for the course.

Re-appearing without Registration:

A student can reappear and clear the course in which he/she failed by taking supplementary examinations. In such a case the marks obtained in internal components and all lab components earlier are carried forward.

5.4 Grading Process

a) The overall performance of the student is described by Cumulative Grade Point Average (CGPA) and is calculated taking into consideration grade obtained by the student in all credited courses and credits attached to it. It is the weighted average of the grade points of all the letter grades obtained in credited courses by the student from his entry into the University. CGPA is computed as follows:

$$CGPA = \frac{c_1g_1 + c_2g_2 + \dots + c_ng_n}{c_1 + c_2 + \dots + c_n}$$

where $c_1, c_2 \dots c_g$ denotes credits associated with the course applied and g_1, g_2 ...denotes grades obtained by the student.

b) At the end of all evaluation components based on the performance of the student, each student is awarded with **letter grade** on a **relative scale**. The list of letter grades and its connotation are given below:

| Grade | Qualitative Meaning | Grade Point attached |
|-------|---------------------|----------------------|
| × | Excellent | 10 |
| A | Very Good | 9 |
| ₽ | Good | 8 |
| e | Fair | 7 |
| Ð | Satisfactory | 6 |
| ŧ | Pass | 5 |
| F | Fail | θ |

grades 'X' and 'F' will be earned and remaining grades will be awarded.

b) Absolute grading for 201314 admitted batch onwards vide amendment in XIII Academic Council meeting dated 26th February 2014.

Resolved to adopt the absolute grading system instead of the absolute-cum-relative grading system, by suitably amending the Academic Regulations of all programs for the batches of students admitted from the Academic year 201314 and onwards. The following modifications as given below.

The

| GRADE | GRADE POINTS | % OF MARKS = AICTE EQUATION (10XCGPA-7.5) | RANGE | | AVERAGE |
|-------|-----------------|--|-------|-----|---------|
| 0 | 10 | 92.5 | 85 | 100 | 92.5 |
| Х | 9 | 82.5 | 80 | <85 | 82 |
| А | 8 | 72.5 | 65 | <80 | 72 |
| В | 7 | 62.5 | 60 | <65 | 62 |
| C | 6 | 52.5 | 45 | <60 | 52.5 |
| D | 5 | 42.5 | 40 | <45 | 42.5 |
| F | 0 | | <40 | - | Failed |

- c) A student getting less than 40% of overall score and 40% in the comprehensive examination will be considered to have earned F grade. In combined theory and lab courses along with overall 40% score, the student should get independently 40% in both theory and lab components else treated as failed in both.
- d) A student who obtains 'F' grade has to reappear for the comprehensive examination. However, such a student need not attend the classes and marks obtained in session tests, surprise quiz, case analysis and attendance will be carried for the subsequent attempts of the student.
- e) In case of a student who has earned F grade, after the student has fulfilled all the requirements for passing it will be converted into a valid grade by considering grade cutoffs of the batch in which he/she had appeared for the course for 1st time.
- f) A non-credit course also will be evaluated as a regular course and grades will be allotted.
- g) Audited courses are graded as satisfactory or Un-satisfactory only.
- h) At the end of each semester the University issues grade sheet indicating the CGPA of the student. However, grade sheet will not be issued to the student if he/she has any outstanding dues.

To convert CGPA into equivalent marks the equation to be used is % OF MARKS = $(10 \times CGPA - 7.5)$

5.5 Reports/Grades

- a) The Course Coordinator can award the following Reports/Grades depending on the cases:
 - (i) **Grade** from O, **X**, **A**, **B**, **C**, **D** and **F** is awarded to the student if the student satisfies the corresponding requirements as specified in the section 5.4 (grading).
 - (ii) NA (Not Attended) is awarded to the student if the student has shortage of attendance. When student is given NA he/she has to repeat the course. It should be noted here that NA is different from F grade. For a student with F grade his/her marks obtained in internal evaluation component will be carried forwarded. While for a student awarded with NA Report has to reregister for such a course and attend the classes.
 - (iii) **GP** (Grade Pending) is awarded in situations where Course Coordinator cannot communicate the grade in time because of operational difficulties. The GP report has to be converted into valid grade by the Course Coordinator at a later stage.
 - (iv) RC (Registration Cancelled) is awarded to a student for various reasons when the registration for the course is cancelled by the University. Such a student will have to re-register for the course in subsequent semesters/summer term whenever the course is offered.
 - (v) **DIP** (Discontinued from Program) is awarded in situations where a student wants to discontinue from the program with the prior approval of University.

(vi) W (Withdrawal from Program) awarded in situations where a student decided not to attend for the semester must cancel their classes before the first day of the semester to avoid having the classes be recorded on their transcript and being financially responsible.

6.0 CALENDAR MANAGEMENT FOR UG ENGINEERING PROGRAMS (201314)

- a) The Academic Council approves the schedule of academic activities prescribed for an academic year.
- **b)** Inclusive of dates for registration, class test and end-semester examinations etc. which shall be mentioned in the Academic Calendar of the year, there will be a total of about 90 working days in each semester excluding the period of Comprehensive examinations.

7.0 REGISTRATION DURING SEMESTERS

All courses are categorized into three streams even, odd and dual semester courses. Even semester courses offered only during Even Semester i.e., January-May, Odd Semester courses offered only during Odd Semester, i.e., July-December and Dual semester courses offered during both even and Odd Semesters.

Admission to all courses will be made in the Odd Semester of each session for the 1^{st} and 2^{nd} Semester levels based on the eligibility criteria specified in the section 3.0. A student who satisfies the University eligibility criteria should be present at the University on stated date for further admission procedures.

- Every student is required to be present and register at the commencement of each semester on the day(s) fixed for and notified in the Academic calendar.
- It is the responsibility of the individual student to register for either semester i.e., Even / Odd. Registration in the summer term is optional.
- The University has the right to refuse registration process if a student does not turn up on the day of registration.
- Normally, no late registration shall be permitted after the fifth working day from the scheduled date of commencement of classes, except in special cases such as serious medical problem, family calamity or participation in a national event, considering such compelling reason, a student may be permitted for late registration (within one week of commencement of semester) with prior approval from the Director, Academic Registration with payment of requisite fine as prescribed by the University.
- However, under no circumstances late registration after 15 calendar days from the scheduled date of registration is allowed.
- In the rare case of transfer from other universities after the semester commences, such a student must produce his/her attendance statement from the concerned institution in each course at the time of admission.

7.1 Registering for a course

- a) A student either newly admitted or on rolls has to register for a course in each semester on the day of registration as notified in the Academic calendar. Students failing to register for the course will not be permitted to attend the corresponding classes.
- b) The right of offering a particular course in a semester is only at the discretion of University authorities.
- c) The students registering for the first semester and second semester have to choose the courses prescribed by the University subject to the maximum permissible limit as specified by the University.
- d) Students registering for the second semester and fourth, sixth and eighth Semesters of their study will be permitted to register only if they have:
 - Cleared all the fees, outstanding dues of University and / or Hostel of previous semesters.
 - Paid all prescribed fees for the current semester.
 - Not been debarred from registering for a specified period on disciplinary or any other grounds
- e) From third Semester onwards a student can choose a minimum of seven courses per semester of his choice (or) register for a maximum of 24 credits whichever is less from the curriculum as prescribed by the University, subject to the fulfillment of pre-requisites as defined for each course.
- f) A student shall not be allowed to withdraw from compulsory courses prescribed by the University.
- g) Students, who have opted for minor degree, Honors program or dual degree, can register for more number of credits in a Semester over and above permitted on regular basis by obtaining written permission from Dean Academics, if the student timetable permits.
- h) While doing project work or practice school a student is not permitted to register in any other course except in case of student opting for honors, minor, dual degree etc.
- i) The following conditions apply for a student registering for elective courses
 - (i) The student can register for an elective course within or across the disciplines only if he/she has completed prerequisite courses with eligible grade.
 - (ii) The student is permitted to register for a particular elective course only if the total course load is within the limit decided by the Director Academic Registration.
- j) The student has to register for one management elective course in either seventh (or) eighth Semester.
- k) The University reserves the right to withdraw any elective course offered within one week of the commencement of the semester if sufficient number of students is not registered or for any other reasons.

- I) In such cases, the students are permitted to register for any other elective course of their choice provided they have fulfilled the eligibility conditions.
- m) The University reserves the right to cancel the registration of a student from a course or a semester or debar from the degree on disciplinary grounds.

7.2 Substituting a Registration

- a) Within one week of the commencement of the semester, a student is permitted to substitute an elective course (substitution) subject to availability with prior approval of Dean-Academics.
- b) However, a student is not permitted to withdraw from compulsory course and substitute the same with an elective course.

7.3 Withdrawing from a Registration

- a) A Student is permitted to withdraw from an elective course within one week after the commencement of the semester with the approval of Dean-Academics.
- b) Each application for semester withdrawal (through BOS Chairman) will be examined by the Dean-Academics and depending on the merit of the case an appropriate recommendation will be made to the Chairman Academic Council.
- c) A Student is normally not permitted to withdraw from compulsory course(s) of the discipline.
- d) If a student desires to withdraw from compulsory courses of the discipline, he/she must and should seek prior permission from Dean-Academics provided he/she must have to complete the course whenever the same course(s) are offered later in the academic curriculum before completing his/her graduation. This implies a student has to complete all the compulsory courses prescribed by the department for obtaining the degree of graduation.

7.4 Cancelation of a registration

A student is solely responsible to ensure that all conditions for proper registration are satisfied, and there are no timetable clashes. The registration may be cancelled for a course or the entire semester either by the student or by the University if any irregularity is found at a later stage. A student's registration for the semester may be cancelled, if he does not meet the statutory requirement of Minimum of number of credits or as part of disciplinary action Leave beyond permissible limits may also result in cancellation of registration for a semester.

8.0 TEACHING UG ENGINEERING PROGRAMS

a) Course(s) taught by a single instructor (theory) is referred to as single section course and course(s) taught by group of instructors in more than one section is referred to as multi-section courses.

- b) The teacher for single section course or associated with multi-section courses are referred to as Instructor.
- c) A team of instructors, under the leadership of Course Coordinator (shall be an instructor of any one the theory section) shall work together to meet all requirements of teaching, evaluation and administrative aspects of the course.
- d) A course is conducted and evaluated by the course coordinator with the cooperation of all instructors as a team.
- e) The internal evaluation pattern will be announced by the course coordinator well before the commencement of the class work with the prior approval from the Dean Academics.
- f) Every course coordinator must specify the program outcomes, objectives, credits to be earned and issue of course handouts to the students either in soft copy or in hard copy.
- g) All course handouts are posted in e-learning site one week in advance.
- h) The solution key of internal examinations conducted during the semester will be displayed on the notice board and in the e-learning site immediately after the evaluation component with evaluation scheme by the course coordinator.

9.0 ATTENDANCE

- a) It is mandatory for a student to attend all the classes, tutorials, laboratories and other evaluation components conducted by the University. A student may be detained from appearing for an examination on grounds of shortage of attendance.
- b) Attending the Co-curricular activities like Seminars, Group discussion, Colloquia etc., are mandatory.
- c) In each course attendance will be treated as evaluation component and marks are awarded as shown below:

| % of Attendance in Theory & Practical classes | Marks awarded | |
|--|---------------|--|
| ≥ 95 | 5 | |
| ≥ 90 and < 95 | 4 | |
| ≥ 85 and < 90 | 3 | |
| ≥ 80 and < 85 | 2 | |
| ≥ 75 and < 80 | 1 | |

- d) Required minimum attendance is >= 75% attendance in all courses. On medical grounds a student can avail a condonation of Maximum 10% attendance. However to avail the condonation student has to submit a medical certificate from not below the Rank of Civil asst surgeon and to condone or not is at the sole discretion of Dean-Academics. The condonation list should be sent to the examination section duly signed by the Dean-Academics well in advance..
- e) 75% attendance is mandatory to attain eligibility to appear for the comprehensive examination in a course. If a student fails to maintain 75% attendance and 40% internal

marks in a course he/she will be awarded with NA Report in that course. In such cases, student will not be permitted to attend the comprehensive examination of that course(s) where he/she has obtained NA Report. He/she has to register and repeat the course whenever it is offered.

- f) However, some relaxation to this rule is possible in the case of students participating in extra -curricular activities as identified below:
- One week for state level competitions.
- Two weeks for National level competitions and
- Three weeks for International events

Subjected to a maximum of two such participations in a Semester.

- g) If the period of absence in a semester is for a short duration (of not more than one week) prior application for leave should be submitted to the Head of the Department clearly stating the reasons for absence along with supporting documents. The Head of the Department will grant such leave at his/her discretion.
- h) He/ She may be allowed for makeup of Laboratory/workshop classes conducted during the period of absence.
- i) If the student is continuously absent for more than 4 weeks, his name will be removed and registration stands cancelled.
- j) Absence for a period not exceeding one week in a semester due to sickness or any other unavoidable reason for which prior application could not be made, may be condoned by the Dean of the School/College, provided he is satisfied with the explanation.
- k) This request should be supported by medical certificate from a recognized medical officer not below the rank of Assistant civil surgeon.
- This is also applicable in those cases who have attended for conferences, paper presentations and sports with permission from the authorities where the student has valid reason for absence.
- m) In such cases the student can approach the course coordinator/ instructor for the makeup test or assignment immediately on rejoining.
- n) No makeup examination will be conducted for End semester examinations under any circumstances.
- o) If the period of absence is likely to exceed one week, a prior application for grant of leave should be submitted to the Head of the Department in all the cases.
- p) If the valid period of absence (on medical grounds) is more than 20 continuous working days during the semester the student may apply for withdrawal from the entire semester at any time clearing all the fee dues of the entire course and no fee are refunded at any cost.
- q) The Vice-Chancellor may relax above rules in special situations which arise due to extraordinary circumstances.

10.0 DETENTION

- (i) A student getting less than 40% marks in internals and/ or 75% of attendance in each course will be treated as detained and will not be permitted to appear for the end examinations, he has to repeat the course whenever the University offers it.
- (ii) (A student shall be permitted to register for 5th-semester only if he/she fulfills the academic requirement of total 47 credits from regular and supplementary examinations of 1st, 2nd, 3rd and 4th-Semesters. Similarly for registering in 7th semester a student shall fulfill the academic requirement of total 72 credits from regular and supplementary examinations of 1st to 6th Semesters. He will be allowed to register further for new courses only after clearing the backlogs and acquiring the requisite credits.)

Subsequently dropped vide amendment in XIV Academic Council meeting dated 7th August 2015

11.0 ACADEMIC FLEXIBILITIES

University offers flexibility for B. Tech. Degree students in doing the courses. In addition to the prescribed courses a student can register for more electives, summer term courses, evening courses provided his/her timetable &University facility permits. He / she can either change from one branch to another branch or the transfer of credits from one branch to another branch for which the details are as follows

11.1 Change of Branch

A student admitted to a particular Branch of the B. Tech course will normally continue studying in that branch till the completion of the programme. However, in special cases the University may permit a student to change from one branch to another after the second semester.

- a) Only those who have cleared all the first and second semester subjects of first year are eligible to apply for change of branch.
- b) Change of branch shall be made strictly on the basis of merit of the applicants and availability of seats category wise subjected to the following conditions:
 - (i) Top 1% students of the admitted students will be permitted to change their branch subject to availability of seats.
 - (ii) For others, change will be permitted strictly on merit basis and category basis. Students without fail grades, backlogs and with CGPA ≥ 8 will be eligible to apply. Transfer may be allowed subject to availability of seats and strength of the department does not exceed 5% of intake strength. However a weak student having low CGPA requesting to transfer to other program may be permitted basing on recommendations of ACB.
 - (iii) The request for change (in the order of merit) for student from department A to department B will be considered if:

- Strength of department B does not exceed 5% of intake strength.
- Number of students on rolls in the department A does not fall below 85% of the intake strength.
- The request of student will be reconsidered (again in the order of merit) if student does not violate (b) above, due to another student getting transferred to department A.
- In case of a tie the Grade and / or marks scored by the student in the course of the Department for which he is seeking transfer will be considered.
- **Bio Technology students are also eligible for transfer to other Engineering** Programmes provided they are with the MPC background and satisfy the eligibility. However, other Engineering programme students are eligible for transfer to Bio Technology provided they complete the biology course by registering themselves.
- (iv) All changes of Branches made will be made effective from second year first semester. Change of branch shall not be permitted thereafter.
- (v) Change of branch once made will be final and binding on the student. No student will be permitted, under any circumstances, to refuse the change of branch offered.
- (vi) Change of branch is not applicable for post graduate programmes.

11.2 Credit Transfer

- (i) Credit transfer from KL University to other University or vice versa is permitted only for under graduate programmes.
- (ii) Credit transfer from KL University to other University: Student studying in KL University can take transfer to another University under the following conditions:
 - KL University has signed MOU with the University.
 - A student has to pay the fees for all the remaining years when he/she seeks transfer.
 - However, a student, after seeking transfer from KL University can return to KL University after a semester or year. Based on courses done in the other University, equivalent credits shall be awarded to such students.
- (iii) Credit transfer from another University to KL University: A student studying in another University can take transfer to KL University under the following conditions:
 - When a student seeks transfer, equivalent credits will be assigned to the student based on the courses studied by the student.
 - The student, when transferred from other Universities, has to stick to the rules and regulations of KL University.
 - To graduate from KL University, a student must study at least half of the minimum duration prescribed for a program at KLU.

11.3 Overloading and Under Loading

- a) When a student is permitted to register for more courses during regular semester than normally prescribed by the University, it is known as overloading.
- **b)** In general overloading is permitted to those who have CGPA greater than 8, do not have any backlog course and/or registered for integrated program, Honors program, and Minor degree options etc.
- c) However, registering in a summer term or vocational courses is not considered as overloading.
- **d)** Synonymous to overloading, the University also permits a student to register for fewer courses than normally prescribed. Such cases are known as under-loading.
- e) For both overloading and under-loading, a student has to seek permission from Dean-Academics and also Director Academic Registration, who gives permission on a case to case basis, based on the CGPA of the student.
- f) The University reserves all rights to decelerate the degree program of the student at any time.
- **g)** The student opting for deceleration of the degree programme will not be allowed to repeat the course in the same semester.

11.4 Academic Counseling Board (ACB)

A student will be put under Academic Counseling Board under the following circumstances:

- (i) Has CGPA of less than 5.
- (ii) Has 'F' grade in more than four courses.

The students under Academic Counseling Board may not be allowed to register for all regular courses in the semester based on the recommendation of Academic Council Board. The ACB will counsel and guide the students for proper registration of the courses

12.0 BACKLOG COURSES

- A course is considered to be a backlog if the student has obtained 'F' grade / NA Report in the course; the following regulations apply to a student who has backlog(s):
- a) A student having backlogs has to clear backlog courses first.
- b) A student, who is having more number of backlog courses, shall come under all regulations mentioned in ACB.
- c) A student shall be permitted to register for 5th semester only if he/she fulfills the academic requirement of total 47 credits from regular and supplementary examinations of 1st year and 2nd year.

- d) Similarly for registering in 7th semester a student shall fulfill the academic requirement of total 72 credits from regular and supplementary examinations of 1st, 2nd and 3rd year.
- e) A student can avail any number of chances to clear a backlog course, however the student may be asked to register for a regular course or to do a substitute course if the same course becomes obsolete and is not being offered anymore. Hours allocated for revision, extra learning are not accountable for credits.
- f) A student must clear all backlog courses before he/she opts for Practice School (PS) programme, i.e. a student who has backlog course(s) is not eligible for PS.
- g) Students who are doing their project work/ Practice school are not allowed to register for any other course.
- h) A student detained due to lack of credits / more number of backlogs in a semester has to register only for that semester after acquiring the eligibility for promotion.
- i) Under no circumstances he/she is allowed to register for next semester without registering for the detained one. This is applicable for those joined from Academic Year 2010-11 onwards.

13.0 GRADUATION REQUIREMENTS

A student must fulfill the following requirements for graduating in a course:

- a) Must have cleared minimum of 170-180 credits for under graduate B. Tech programmes.
 For graduation with dual degree/ integrated B. Tech and M.Tech programmes student must have earned 256 – 270 credits, for B. Tech with MBA should earn 245-260 credits and for MCA with M.Tech programme should earn 235 – 245 credits.
- b) Must have cleared compulsory certificate, audited, non-credited courses including one in sports/yoga
- c) Cleared all courses prescribed for him/her in the discipline.
- d) Must have undergone industrial training programme (other than Practice School) for a period of not less than 4 weeks.
- e) A Student shall complete 9 elective courses in the undergraduate program. (5 prof core+1 Management +3 open electives)
- f) Must have obtained minimum number of 9 credits by choosing courses from University Electives/Open Electives category .Students can also earn extra credits by doing courses of their interest for better prospectus in Higher Education/Public, private and MNC sector jobs/Foreign Education/Entrepreneurship development etc.
- g) A Student shall complete all audited courses and Non-credit courses including one in sports/games/yoga and NCC/NSS/NSO as prescribed by their respective BOS.
- h) Successful completion of Mini projects & term papers are mandatory as a part of their curriculum.

- i) Obtained a minimum CGPA of 5.5 for undergraduate or dual degree/Programs.
- j) Obtained a minimum CGPA of 8.0 for obtaining Honors degree.
- k) Must have finished all the above mentioned requirements in less than twice the period mentioned in the Academic structure for each programme which includes deceleration period chosen by the student, deceleration imposed by University or debarred from the University.

14.0 RUSTICATION

A student may be rusticated from the University on disciplinary grounds based on the recommendations of any committee or examination committee by the Vice Chancellor.

15.0 AWARD OF DEGREES

A student having cleared all the courses and met all the requirements for the award of degree with

- 1) CGPA < 6.75 will be awarded second class
- 2) CGPA ≥6.75 will be awarded first class and with
- 3) CGPA ≥7.5 will be awarded first class with distinction provided the student has cleared all the courses in first attempt (Regular) within the stipulated time.

16.0 AWARD OF MEDALS

University has instituted Gold and silver medals to the highest and second highest rank holders respectively as per CGPA and other academic conditions in each programme of specialization.

- 1. The grade obtained by betterment, will not be considered for the award.
- 2. He/she must be obtained minimum distinction for the award of Gold or silver medal.