KONERU LAKSHMAIAH EDUCATION FOUNDATION

(A DEEMED TO BE UNIVERSITY U/S 3 OF UGC ACT)

K L University

Vaddeswaram – 522 502 (A.P) INDIA

ACADEMIC RULES & REGULATIONS

M.Tech

(Master of Technology)

ACADEMIC REGULATIONS FOR M.TECH. PROGRAM
(2015 – 16 & 2016-17 ADMITTED BATCHS)

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

1.0 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.

Course

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

Program

Program is 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.

Term Paper

A 'term paper' is a research paper written by students engulfing 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.

Dissertation

Dissertation is a course that a student has to undergo during his/her second 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.

Practice School

It is a part of the total program and takes one/two full semester/s in a professional location, where the students and the faculty get involved in finding solutions to live industrial problems. A student can choose thesis/practice school during his/her 3rd and/or 4th semester of his/her course to meet the final requirements for a degree.

BOS (Board of Studies)

Board of studies 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.

Backlog Course

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

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.

Re- Registering

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

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.

Grade Point

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

Grade

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

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, Credit structure, 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.

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.

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.

Credit Transfer

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

Curriculum

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

Detention in a course

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

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.

Semester End Examinations

It is an examination conducted at the end of a course of study.

Make-up Test

An additional test scheduled on a date other than the originally scheduled date.

Compulsory course

Courses required to be undertaken for the award of the degree as per the program.

Elective Course

A course that can be chosen from a set of courses.

Degree

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

Overloading

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

Program Educational Objectives

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

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.

Course Outcomes

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

Registration

It is a process of enrolling into a set of courses in a semester/ term of the Program.

Semester

It is a period of study consisting of 15 to 18 weeks of academic work equivalent to 90 actual teaching days. The odd Semester starts normally in July and even semester in December.

Substitution of Elective course

Replacing an elective course with another elective course as opted by the student.

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.

Department

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

2.0 DETAILS OF M.TECH PROGRAMS ON OFFER

K.L University confers M. Tech degree to candidates who are admitted in the Program and fulfills the following requirements for the award of the degree.

a) Must successfully earn minimum of 80-85 credits, as stipulated in the program structure.

b) Must successfully complete four (4) Professional Elective Courses.

c) Must successfully complete three (3) certificate courses in discipline domain areas, in addition to one from yoga / sports & games / fine arts.

d) Must successfully complete the Seminar and term paper.

e) Must successfully complete Dissertation and/or practice school.

f) Must have published a minimum of one publication (along with Supervisor) in Scopus/SCI indexed Journals.

g) Must have successfully obtained a minimum CGPA of 5.5 at the end of the program.

h) Must have finished all the above-mentioned requirements in less than twice the period mentioned in the Academic structure for each program, which includes debarred period from the University.

2.1 Programs offered at postgraduate level in Engineering

The students are admitted into the following 2 year full time M. Tech Programs

1. Master of Technology in Biotechnology (BT)
2. Master of Technology in Structural Engineering (SE)
3. Master of Technology in Construction Technology and Management (CTM)
4. Master of Technology in Geo-Spatial Technology (GST)
5. Master of Technology in Cloud Computing (CC)
6. Master of Technology in Computer Science & Engineering (CSE)
7. Master of Technology in Computer Networks and Security (CNS)
8. Master of Technology in Cyber Security & Digital Forensics (CSDF)
9. Master of Technology in Computational Intelligence (CI)
10. Master of Technology in Communication and Radar Systems (CRS)
11. Master of Technology in Signal Processing (SP)
12. Master of Technology in Very Large Scale Integration (VLSI)
13. Master of Technology in RF and Microwave Engineering (RFMW)
14. Master of Technology in Space Technology and Atmospheric Science (STAS)
15. Master of Technology in Web Technologies (WT)
16. Master of Technology in Wireless Communication and Sensor Networks (WCSN)
17. Master of Technology in Embedded Systems (ES)
18. Master of Technology in Power Electronics and Drives (PED)
19. Master of Technology in Power Systems (PS)
20. Master of Technology in Alternate Energy Technologies (AET)
21. Master of Technology in Thermal Engineering (TE)
22. Master of Technology in Mechatronics (MECH)

3.0 ELIGIBILITY CRITERIA FOR REGISTERING INTO M.Tech. PROGRAMS

Candidates should have passed B.E. / B.Tech. / MCA / M.Sc., etc., from recognized universities / institutions in respective discipline with minimum of 55% marks or equivalent CGPA. Also, the candidates should have secured a qualifying rank in the PG entrance Examination i.e., KLU PGET / GATE / AP PGCET / any other equivalent examination.

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, Govt. of India.

4.0 PG PROGRAM CURRICULUM DESIGN

For an academic program 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).

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) 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.

e) A student can choose Dissertation/practice school only during 3rd and/or 4th semester.

4.2 Course Structure

a) Every course has a Lecture-Tutorial-Practice(L-T-P) component attached to it.
b) Based upon the LTP structure the credits are allotted to a course using the following criteria.
   i. Every lecture hour is equivalent to one credit.
   ii. Every Tutorial/Practice hour is equivalent to half credit.
   iii. If the calculated value of credit is a fraction, it is rounded to the lower number.

5.0 EVALUATION OF M.Tech. PROGRAMS

A student's academic progress is examined through one or more of the following methods as decided by the Course Coordinator and duly approved by the Dean Academic.

- Assignments
- Sessional Tests
- Semester End Examinations
- Term-paper
- Dissertation
- Laboratory Reviews
- Seminars
- Group Discussions
- Participation in Active Learning
- Case Study Reports
- Capstone Design Projects
- Simulations

a) The Sessional tests and the Semester-End Examinations will be conducted by the University Examination Cell as per the Academic Calendar.
b) Appearing in the Semester End Examinations is mandatory for all eligible students.
c) Students will be permitted to appear in the examinations only in those courses for which they have registered.
d) Supplementary examinations will be held only once in a year.

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

5.1 In-Semester Evaluation

a) The process of evaluation should be continuous throughout the semester and involves components as decided by the course coordinator listed in section 5.0, constituting a maximum weightage of 50% of aggregate marks of the course.

b) The distribution of weightage for various evaluation components will be decided and notified by the course coordinator through the course handout after approval by the Dean Academic.

c) In order to maintain transparency in evaluation, answer scripts will be shown to the students for verification, within one week of conduct of exam. If there is any discrepancy in evaluation, the student can request the course coordinator to re-evaluate.

d) No correction is permitted once the course coordinator submits the marks/grades to the Controller of Examination.

5.2 Detention policy

a) In any course, a student has to maintain a minimum of 75% attendance and must secure a minimum of 40% marks in In-Semester Examinations to be eligible for appearing to the Semester End Examination, failing to fulfill these conditions will deem such student to have been detained in that course.

b) However the following are the special cases where the lack of attendance can be condoned:
   i. Up to a maximum of 10% on medical grounds, in which case the student must submit the medical certificate from any recognized medical practitioner.
   ii. Up to a maximum of 10% if the student represents the University / State / Country in any Extra / Co curricular activities.
   iii. The maximum extent to which a student can be condoned is 10%, and any student with less than 65% is deemed to be detained.

5.3 Semester End Examination

- The minimum weightage for Semester End Examination is 50% of the aggregate marks.
- The duration of such examination is 3 hours.
- The pattern of the examination will be decided and notified by the Course Coordinator through the Course handout, after approval from the Dean Academic.
- Double evaluation of answer scripts is followed. There is no re-evaluation for the P. G. programs.

Re-appearing with Registration:

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

   i) In case the student fails to fulfill the minimum academic requirements for the award of the degree
   ii) When she/he 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 she/he is failed by taking supplementary examinations. In such a case the internal components obtained earlier are carried forward.

5.4 Reports/Grades

5.4.1. Grading Process

a) At the end of all evaluation components based on the performance of the student, each student is awarded based on *absolute grading system*. The list of absolute grades and its connotation are given below:

GRADE	GRADE POINTS	RANGE	
O (Outstanding)	10	85	100
A+(Excellent)	9	80	<85
A(Very Good)	8	65	<80
B+(Good)	7	60	<65
B(Above Average)	6	50	<60
C(Average)	5	45	<50
P (Pass)	4	40	<45
F(Fail)	0	<40	-
Ab (Absent)	0	-	-

b) The SGPA is the ratio of sum of the product of the number of credit s with the grade points scored by a student in all the courses and the sum of the number of credits of all the courses undergone by a student, in a semester.

$$\text{i.e SGPA } (S_i) = \sum(C_i \times G_i) / \sum C_i$$

where 'C_i' is the number of credits of the ith course and 'G_i' is the grade point scored by the student in the ith course.

c) The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a program,

$$\text{i.e. CGPA} = \sum(C_i \times S_i) / \sum C_i$$

where 'S_i' is the SGPA of the ith semester and 'C_i' is the total number of credits in that semester.

d) The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

e) CGPA can be converted to percentage of marks : 10 X CGPA - 7.5

f) A student who obtains 'F' grade has to reappear for all the components of Semester End examination.

g) Audit/Certificate courses are graded as satisfactory or non-satisfactory only.

h) At the end of each semester, the University issues grade sheet indicating the SGPA and CGPA of the student. However, grade sheet will not be issued to the student if he/she has any outstanding dues.

5.5 Betterment

a) A student may reappear for semester end examination only in the theory part of the course for improving the grade, subject to the condition that, her/his CGPA is ≤ 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 can re-register in any course at any time before the completion of his/her program provided the University permits.

c) A student cannot reappear for semester end examination in courses like Industrial Training, courses with their L-T-P Structure 0-0-X, Project – 1, Project – 2, Practice School and Term Paper.

d) The student ceases to be eligible for award of M.Tech. degree with First class and distinction, in case s/he takes up the betterment option.

6.0 REGISTRATION PROCESS

For every course, the student has to undertake the registration process prior to commencement of the course-work, based on the following conditions;

a) Registration into a course will be permitted only for such courses, which are offered by the program in that particular semester.

b) The University has the right to refuse registration process if a student does not turn up on the day of registration.

c) Registration shall not be permitted after the fifth working day from the scheduled date of commencement of classes.

d) The University reserves the right to withdraw any elective course offered within one week of the commencement of the semester if sufficient numbers of students have not registered or for any other reasons. In such cases, the students are permitted to register for any other elective course of their choice provided they have fulfilled the eligibility conditions.

e) 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.

7.0 CREDIT TRANSFER

a) Credit transfer from other University to K L University or vice versa is permitted only for under graduate program.

b) Credit transfer from K L University to other University: Student studying in K L University can take transfer to another University under the following conditions:

  i. K L University has signed MOU with the University.

  ii. However, a student, after seeking transfer from K L University can return to K L University after a semester or year. Based on courses done in the other University, equivalent credits shall be awarded to such students.

c) Credit transfer from another University to KL University: A student studying in another University can take transfer to K L University under the following conditions:

  i. When a student seeks transfer, equivalent credits will be assigned to the student based on the courses studied by the student.

ii. The student, when transferred from other Universities, has to stick to the rules and regulations of K L University.

iii. To graduate from K L University, a student must study at least half of the minimum duration prescribed for a program at KLU.

8.0 ACADEMIC COUNSELING BOARD (ACB)

Academic Counseling Board is constituted by the Dean, Academic, for each program separately. This board shall comprise of the Chairman, Board of Studies, of the relevant program, two (2) Professors and two (2) Associate Professors.

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

(i) Has CGPA of less than 6.00.

(ii) Has 'F' grade in multiple 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 Counseling Board and decision of Dean, Academic.

9.0 BACKLOG COURSES

A course is considered to be a backlog if the student has obtained 'F' grade in the course; the student has to re-appear for all components of semester end examinations in that course. However, student must successfully complete such a course in a maximum of four (4) consecutive attempts, failing which s/he must re-register for that course or a substitute course. The decision for substitute course shall be obtained from the Dean, Academic, based on the recommendations of the Board of Studies.

10.0 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.

11.0 AWARD OF DEGREES

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

1) CGPA between 5.5 to 6.75 will be awarded second class

2) CGPA ≥ 6.75 will be awarded first class

3) CGPA ≥ 7.5 will be awarded first class with distinction provided the student has cleared all the courses in first attempt, and must have fulfilled all the program requirements in two (2) years duration.

12.0 AWARD OF MEDALS

University awards Gold and silver medals to the top two (2) students based on CGPA.

However, 1. the grade obtained by betterment, will not be considered for this award.

2. s/he must have obtained first class with distinction for the award of Gold or silver medal.

Any of the above rules can be altered at the discretion of the Vice Chancellor in special situations.

1.0 TERMINOLOGY