

Glocal School of Technology

Department of Mechanical Engineering

M. Tech. (Production Engineering) Program

1. Introduction:

1.1 Background

Glocal University provides science-based engineering education with a view to produce quality engineers and scientists. The curriculum provides broad based knowledge and simultaneously builds a temper for the life long process of learning and exploring. At the postgraduate level, students are encouraged to look beyond their area of specialization to broaden their horizons through open electives and self-learning.

The medium of instruction in the institute is English.

1.2 Programme offered:

Glocal university offers undergraduate, postgraduate and doctorate programme in field of Mechanical Engineering. More details are given below:

1.2.1 Undergraduate (B. Tech. in Mechanical Engineering)

1.2.2 Postgraduate [M. Tech. in Mechanical Engineering (Specialization - Production Engineering)]

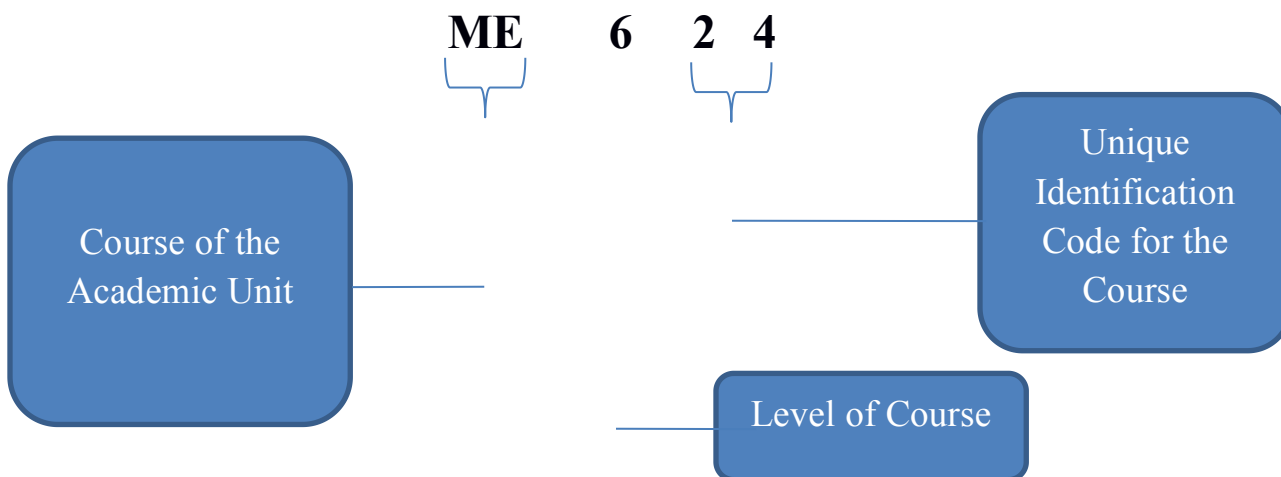
1.2.3 Doctorate (Ph.D. in Mechanical Engineering)

2. Course Structure

2.1 Course Numbering

Every course at Glocal University runs for the full length of the semester. A student registers in advance for courses that he/she wants to study and at the end of the semester a grade is awarded. On obtaining a pass grade, the student earns all the credits associated with the course while a fail grade does not get any credit. Partial credits are not awarded.

Each course is denoted by a unique code consisting of two alphabets followed by three numerals:



2.2 Credit System

Education at the institute is organized around the semester-based credit system of study. A student is allowed to attend classes in a course and earn credit for it, only if he/she has registered for that course. Prominent features of the credit system are a process of continuous evaluation of a student's performance/progress and flexibility to allow a student to progress at an optimum pace suited to his/her ability or convenience, subject to fulfilling minimum requirements for continuation and within the maximum allowable period for completion of a degree.

A student's performance/progress is measured by the number of credits that he/she has earned, i.e. completed satisfactorily. Based on the course credits and grades obtained by the student, grade point average is calculated. A minimum grade point average is required to be maintained for satisfactory progress and continuation in the programme. Also a minimum number of earned credits and a minimum grade point average should be acquired in order to qualify for the degree.

2.3 Course Credit Assignment

Each course has a certain number of credit(s) or non-graded unit(s) assigned to it depending upon its lecture, tutorial and laboratory/practical contact hours in a week. This weightage is also indicative of the academic expectation that includes in-class contact and self-study outside class hours.

Lectures: One lecture, one hour per week over the period of one 14 week semester is assigned one credit.

Tutorials: One lecture, one hour per week over the period of one 14 week semester is assigned half credit.

Practical/Practice: One laboratory / practice hour per week over the period of one 14 week semester is assigned half credit.

2.4 Grading System:

The grade obtained in a course reflects a student's performance in the course. While relative standing of the student is indicated by his/her grades, the process of awarding grades is not necessarily based upon fitting the marks scored by the students to some statistical distribution. The course coordinator and associated faculty for a course formulate appropriate procedure to award grades that are reflective of the student's performance visà-vis the expected learning outcomes of the course.

QUALIFICATION	SCORE OF PERCENTAGE POINT	GRADE	GRADE POINT
Outstanding	91 and above	O	10
Excellent	81 – 90	A+	9
Very Good	71 – 80	A	8
Good	61 – 70	B+	7
Above Average	56 – 60	B	6
Average	51 – 55	C	5
Pass	40 – 50	P	4
Fail	Below 40 %	F	0
Absent		Ab	
Malpractice		M	
Satisfactory		S	
Unsatisfactory		Z	

2.5 Evaluation of Performance

The performance of a student will be evaluated in terms of three indices, viz., the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester, Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point in time and Degree Grade Point Average (DGPA). Degree Grade Point Average (DGPA) is calculated on the basis of the best valid credits in each category, after graduation requirements in all categories are met.

The Earned Credits (E.C.) are defined as the sum of credits for courses in which a student has been awarded pass grades. Points secured in a semester = Σ (Course credits $\times$ Grade point for all courses in which pass grade has been obtained). The SGPA is calculated on the basis of grades obtained in all courses the student registered for, in the particular semester, except audit courses.

The CGPA is calculated on the basis of pass grades obtained in all completed semesters, except audit courses and courses in which S/Z grade is awarded.

3 Attendance

3.1 Attendance rule:

Students need to maintain at least 75% attendance to appear in the exams.

Course Structure

Master of Technology Programme (Specialization in Production Engineering)

The overall credits of structure

Category	PC	PE	OC	TOTAL
Credits	45	11	6	62

Programme Core (PC)

S. No.	Subject Code	Subject	Credit structure	Total credit
1	ME 899	Major Project Part 1 (MEP)	0-0-12	6
2	ME 999	Major Project Part 2 (MEP)	0-0-24	12
3	ME 601	Metal Forming Technology	3-0-0	4
4	ME 602	Machining Processes and Analysis	3-0-2	4
5	ME 603	CNC Technology and Programming	3-0-2	4
6	ME 604	Metrology	2-0-2	3
7	ME 605	Welding and Allied Processes	3-0-2	4
8	ME 701	Composite Materials and Processing	3-0-2	4
9	ME 606	Casting Technology	3-0-2	4
Total Credit				45

List of Elective Subjects (PE)

Serial No.	Subject Code	Subject	Credit Structure	Total Credit
1	ME 702	Principles of Management	3-0-0	3
2	ME 703	Process Engineering	2-0-4	4
3	ME 704	Rapid Prototyping and Tooling	3-0-2	4
4	ME 705	CAD/CAM	3-0-2	4
5	ME 706	Injection Moulding and Mould Design	2-0-2	3
6	ME 707	Automation in Manufacturing	3-0-2	4
7	ME 708	Metal forming Analysis	3-0-0	3
8	ME 709	Machine Tool Design	3-0-2	4
9	ME 710	Quality Assurance	3-0-2	4
10	ME 711	Operations Planning and Control	3-0-2	4
11	ME 712	Industrial Engineering and Systems	3-0-2	4
12	ME 713	Methods Engineering and Ergonomics	2-0-2	3