

# INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR

## COURSES AND CREDIT SYSTEM

### Course Number and Title

Each course has a unique number consisting of a code to identify the discipline with 2 or 3 characters of English alphabet followed by a *three-digit* number.

HS:000	Humanities and Social Science
ES:000	Engineering Sciences
IN:000	Institute Electives
LS:000	Biological Engineering
CL:000	Chemical Engineering
CE:000	Civil Engineering
EE:000	Electrical Engineering
MSE:000	Materials Science and Engineering
ME:000	Mechanical Engineering
CS:000	Computer Sciences and Engineering
MS:000	Management Studies
CH:000	Chemistry
PH:000	Physics
MA:000	Mathematics

The first digit following the alphabetic code represents the level of the course.

XX:100	First year B.Tech level course
XX:200	Second year B.Tech level course
XX:300	Third year B.Tech level course
XX:400	Fourth year B.Tech level course
XX:500	MSc/MA level course
XX:600	PG/PhD level course
XX:700	PG/PhD year B.Tech level course

### Course Credits

The credits of a course are based on the scaling of learning new concepts and developing in-depth understanding. Besides attending the lectures or laboratory sessions, the students are expected to spend a significant amount of time on learning the same concepts more in depth and imbibe those concepts through assignments, exercises, projects and reading reference material. The credits assigned to a course reflect the amount of effort a student is expected to put in that course. It is expected that the student will spend at least double the period outside the lectures for further learning on the topics covered. Part of this further learning may come from tutorial component associated with some of these courses, which will help the students in streamlining their thoughts and discussing their doubts with the instructor/Tutor.

Usually the courses will have 3 lectures per week with approximately 40 lecture hours in a semester, which is defined as a 4 credit course.

The laboratory component is generally associated with the courses and the students are

expected to spend almost the same time outside the lab for initial preparation and generating the reports. Generally, 2-3 hours of laboratory contact hours per week will earn one credit.

Besides the regular courses, there are equivalent credits given for Short module courses. Details of credit structure with some examples are given below.

Type of Courses Basis of Credits	Contact Hours Distribution/Week			Approximate Contact Hours in a Semester	Credits
	Lecture	Tutorial	Lab		
<b>Regular theory and Laboratory Courses</b>	<b>2</b>	<b>1</b>	<b>0</b>	28 + 12 + 0	3
	<b>3</b>	<b>0</b>	<b>0</b>	40 + 0 + 0	4
	<b>3</b>	<b>1</b>	<b>0</b>	40 + 12 + 0	4
	<b>4</b>	<b>0</b>	<b>0</b>	52 + 0 + 0	5
	10 Lectures for 1 credit	<b>0</b>	<b>2-3</b>	0 + 0 + 20-30	1
	No credit for tutorial	<b>0</b>	<b>4</b>	0 + 0 + 40	2
	2-3 Lab hours per week	<b>2</b>	<b>3</b>	28 + 0 + 22	4
	for 1 credit	<b>3</b>	<b>3</b>	40 + 0 + 20	5
	<b>3</b>	<b>1</b>	<b>2</b>	40 + 12 + 20	5
<b>Short Module:</b>	8-10 Lectures				1
	16-20 Lectures				2

Thus, a course may usually have credits in the range of 1-5 with break-up as L-T--P-[C], where [L], [T] and [P] indicate number of contact hours per week for lecture, tutorial, and laboratory, respectively, and [C] indicates the credits, determined with the procedure outlined above. Pre-requisites, if applicable, are also mentioned. A few courses without involving formal lectures, tutorials, or laboratory sessions like Physical Education, Seminar, etc. are assigned zero credits.

### Approval of a New Course

A new course can be proposed by any faculty member in a prescribed format. The Coordinator of the concerned discipline sends out the proposal to all faculty members to elicit their comments and suggestions, with a copy to the Chairperson, SAPC. After a minimum period of two weeks, the proposal is revised (if necessary), taking into account all the comments / suggestions received. The Coordinator of the discipline then writes to the Chairperson, SAPC for approval of the course.

The SAPC can constitute sub-committees to design/ modify core courses. The proposals are then circulated to all faculty for eliciting their comments/ suggestions and subsequent revision (if necessary) before submitting to the Senate for approval. Similarly, the discipline specific courses are designed/modified by the concerned discipline, processed by respective DPC using the procedure stated above and submitted to SAPC for approval.

### Discontinuation of a Course

Any course, which is not offered for five consecutive years, may be discontinued.