



An ISO 9001-2008 Certified Institute

GITAM

GANGA INSTITUTE OF TECHNOLOGY & MANAGEMENT

Approved by AICTE, Ministry of Education, New Delhi, Recognized under section 2(f) of UGC Act, 1956
Affiliated to Maharshi Dayanand University, Rohtak ('A+' Grade University Accredited by NAAC) and HSBTE, Panchkula

Reference No. GITAM/

Date.....

Query 1.2.1: Provide Structure of the program clearly indicating courses, credits/Electives as approved by the competent board. Provide circular of programs in which CBCS/Elective course system implemented in the last completed academic year certified by the Registrar of the affiliating university for year 2020-21.

Response:

The structure of the program clearly indicating courses, credits/ Electives as approved by the competent board/University BOS. The circular of programs in which CBCS/Elective course system implemented in the last completed academic year certified by the Registrar for year 2020-21 are provided.





An ISO 9001-2008 Certified Institute

GITAM

GANGA INSTITUTE OF TECHNOLOGY & MANAGEMENT

Approved by AICTE, Ministry of Education, New Delhi, Recognized under section 2(f) of UGC Act, 1956
Affiliated to Maharshi Dayanand University, Rohtak ('A+' Grade University Accredited by NAAC) and HSBTE, Panchkula

Reference No. GITAM/

Date.....

List of programs in which the CBCS scheme/Elective course scheme has been implemented in the session 2020-21

S. No.	Program	Availability of CBCS scheme	Availability of Elective course scheme
1	B. Tech Civil Engineering	No	Yes
2	B. Tech Computer Science and Engineering	No	Yes
3	B. Tech Electronics and Communication Engineering	No	Yes
4	B. Tech Mechanical Engineering	No	Yes
5	B. Tech Electrical Engineering	No	Yes
6	B. Tech Fire and Technology Safety	No	Yes
7	M.Tech Computer Science and Engineering	Yes	Yes
8	M.Tech Cyber Forensics and Information Security	No	Yes
9	M.Tech Machine Design	No	Yes
10	M.Tech Manufacturing and Automation	Yes	Yes
11	M.Tech Structural Design	No	Yes
12	M.Tech Electronics and Communication Engineering	Yes	Yes
13	M.Tech Electrical Power Systems	No	Yes
14	Bachelor of Business Administration	No	No
15	Bachelor of Computer Applications	No	No
16	Master of Business Administration	Yes	Yes
17	Master of Computer Applications	Yes	Yes


Registrar

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Kablana, Bahadurgarh-Jhajjar Road, Distt. Jhajjar, Delhi NCR, Haryana-124104

Tele Fax - 01251-239488, M.: 8684000891, 892, 893, 9654292946 | Visit us at www.gangainstitute.com, E-mail - gitmkablana@gmail.com

Empowering Minds to Conquer



GANGA INSTITUTE OF TECHNOLOGY & MANAGEMENT

Approved by AICTE, Ministry of Education, New Delhi, Recognized under section 2(f) of UGC Act, 1956
Affiliated to Maharshi Dayanand University, Rohtak ('A+' Grade University Accredited by NAAC) and HSBTE, Panchkula

Reference No. GITAM/BR/2022/811

AC-2117
17/8/22

Date 26/7/2022

To
The Deputy Registrar (Academic)
Maharshi Dayanand University
Rohtak

SABIT
ACS-II
21/8/22
01-8-2022

Subject: Certification of the list of programs in which the CBCS scheme/Elective course scheme has been implemented in the session 2020-21.

Dear Sir,

Ganga Institute of Technology & Management affiliated to the MDU Rohtak is going to apply for the NAAC accreditation. In this connection a certified list of programs in which the CBCS /Elective course scheme has been implemented is to be provided to the NAAC. The list of programs available in the institute during 2020-21 is as under along with the applicable scheme. Kindly verify the same course scheme and issue the necessary certificate

S. No.	Program	Availability of CBCS scheme	Availability of Elective course scheme
1	B. Tech Civil Engineering	No	Yes
2	B. Tech Computer Science and Engineering	No	Yes
3	B. Tech Electronics and Communication Engineering	No	Yes
4	B. Tech Mechanical Engineering	No	Yes
5	B. Tech Electrical Engineering	No	Yes
6	B. Tech Fire and Technology Safety	No	Yes
7	M.Tech Computer Science and Engineering	Yes	Yes
8	M.Tech Cyber Forensics and Information Security	No	Yes
9	M.Tech Machine Design	No	Yes
10	M.Tech Manufacturing and Automation	Yes	Yes
11	M.Tech Structural Design	No	Yes
12	M.Tech Electronics and Communication Engineering	Yes	Yes
13	M.Tech Electrical Power Systems	No	Yes

Thanking You

Yours Sincerely,



DIRECTOR
Director

M.D. UNIVERSITY, ROHTAK
SCHEME OF STUDIES AND EXAMINATION
Bachelor of Technology
Scheme effective from 2018-19
SEMESTER 1st (COMMON FOR ALL BRANCHES)

Sr. No.	Category	Course Notation	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
					L	T	P			Mark of Class work	Theory	Practical	Total	
1	Basic Science Course	A	Refer to Table 1	Physics-1	3	1	0	4	4	25	75		100	3
		B	BSC-CH-101G	Chemistry-1	3	1	0	4	4	25	75		100	3
2	Basic Science Course	C	Refer to Table 2	Mathematics-I	3	1	0	4	4	25	75		100	3
3	Engineering Science Course	A	ESC-EE-101G	Basic Electrical Engineering	3	1	0	4	4	25	75		100	3
	Engineering Science Course	B	Refer to Table 3	Programming for Problem Solving	3	0	0	3	3	25	75		100	3
4	Engineering Science Course	A	ESC-ME-101G	Engineering Graphics & Design	1	0	4	5	3	25		75	100	3
		B	ESC-ME-102G	Workshop Technology	1	0	0	1	1	25	75		100	3
5	Basic Science Course	A	Refer to Table 1	Physics Lab-1	0	0	3	3	1.5	25		25	50	3
		B	BSC-CH-102G	Chemistry Lab-1	0	0	3	3	1.5	25		25	50	3
6	Engineering Science Course	A	ESC-EE-102G	Basic Electrical Engineering Lab	0	0	2	2	1	25		25	50	3

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

		B	Refer to Table 3	Programming in C Lab	0	0	4	4	2	25		25	50	3	
7	Engineering Science Course	B	ESC-ME-103G	Manufacturing Practices Lab	0	0	4	4	2	25		25	50	3	
8	Humanities and Social science including Managemen t courses	C	HSMC-ENG-101G	English	2	0	0	2	2	25	75		100	3	
TOTAL CREDIT										19.5	175/200	300/375	125/75	600/650	


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

M.D. UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION

· Bachelor of Technology

Scheme effective from 2018-19

SEMESTER 2nd (COMMON FOR ALL BRANCHES)

Sr. No.	Category	Course Notation	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
					L	T	P			Mark of Class work	Theory	Practical	Total	
1	Basic Science Course	B	Refer to Table 1	Physics-1	3	1	0	4	4	25	75		100	3
		A	BSC-CH-101G	Chemistry-1	3	1	0	4	4	25	75		100	3
2	Basic Science Course	C	Refer to Table 2	Mathematics-II	3	1	0	4	4	25	75		100	3
3	Engineering Science Course	B	ESC-EE-101G	Basic Electrical Engineering	3	1	0	4	4	25	75		100	3
	Engineering Science Course	A	Refer to Table 3	Programming for Problem Solving	3	0	0	3	3	25	75		100	3
4	Engineering Science Course	B	ESC-ME-101G	Engineering Graphics & Design	1	0	4	5	3	25		75	100	3
		A	ESC-ME-102G	Workshop Technology	1	0	0	1	1	25	75		100	3
6	Basic Science Course	B	Refer to Table 1	Physics Lab-1	0	0	3	3	1.5	25		25	50	3
		A	BSC-CH-102G	Chemistry Lab-1	0	0	3	3	1.5	25		25	50	3
7	Engineering Science Course	B	ESC-EE-102G	Basic Electrical Engineering Lab	0	0	2	2	1			25	50	3


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

		A	Refer to Table 3	Programming in C Lab	0	0	4	4	2	25		25	50	3
8	Humanities and Social science including Management courses	C	HSMC-ENG-102G	Language Lab	0	0	2	2	1	25		25	50	3
9	Engineering Science Course	A	ESC-ME-103G	Manufacturing Practices Lab	0	0	4	4	2	25		25	50	3
TOTAL CREDIT										18.5	200/175	225/300	175/75	600/500

Note: Examiner will set nine questions in total. Question one will be compulsory. Question one will have 10 parts of 2.5 marks from all units and remaining eight questions of 12.5 marks each to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Important Notes:

1. Significance of the Course Notations used in this scheme
C = These courses are common to both the groups (Group-A and Group -B).
A = Other compulsory courses for Group-A.
B = Other compulsory courses for Group-B.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Course code for different branches

Table 1

Sr. No.	Course Name	Course Code	Branch
1.	Introduction to Electromagnetic Theory	BSC-PHY-101G	<ul style="list-style-type: none"> • Electronics and Communication Engineering • Electronics and Computer Engineering • Electronics and Telecommunication Engineering • Mechanical Engineering • Fire Technology and Safety Engineering • Mechanical and Automation Engineering • Automobile Engineering
2.	Waves and Optics & Quantum Mechanics	BSC-PHY-102G	<ul style="list-style-type: none"> • Electrical Engineering • Electronics and Electrical Engineering
3.	Semiconductor Physics	BSC-PHY-103G	<ul style="list-style-type: none"> • Computer Science Engineering • Information Technology • Computer Science and Information Technology
4.	Mechanics	BSC-PHY-104G	<ul style="list-style-type: none"> • Civil Engineering • Printing Technology
5.	Optics, Optical Fibre, Magnetism and Quantum Mechanics	BSC-PHY-105G	<ul style="list-style-type: none"> • Bio-Technology Engineering • Textile Technology • Textile Chemistry • Fashion and Apparel Engineering
6.	Introduction to Electromagnetic Theory (IEMT) Lab	BSC-PHY-111G	<ul style="list-style-type: none"> • Electronics and Communication Engineering • Electronics and Computer Engineering • Electronics and Telecommunication Engineering • Mechanical Engineering • Fire Technology and Safety Engineering • Mechanical and Automation Engineering • Automobile Engineering
7.	Wave Optics & Quantum Mechanics Lab	BSC-PHY-112G	<ul style="list-style-type: none"> • Electrical Engineering • Electronics and Electrical Engineering
8.	Semiconductor Physics Lab	BSC-PHY-113G	<ul style="list-style-type: none"> • Computer Science Engineering • Information Technology • Computer Science and Information Technology
9.	Mechanics Lab	BSC-PHY-114G	<ul style="list-style-type: none"> • Civil Engineering • Printing Technology
10.	Optics, Optical Fibre,	BSC-PHY-115G	<ul style="list-style-type: none"> • Bio-Technology Engineering

Magnetism and Quantum Mechanics (OFMQ)	<ul style="list-style-type: none"> • Textile Technology • Textile Chemistry • Fashion and Apparel Engineering
--	--

Table 2

Sr. No.	Course Name	Course Code	Branch
1.	Math-I (Calculus and Matrices)	BSC-MATH-101G	<ul style="list-style-type: none"> • Mechanical Engineering • Electronics and Communication Engineering • Civil Engineering • Electrical Engineering • Electronics and Electrical Engineering • Printing Technology • Automobile Engineering • Mechanical and Automation Engineering • Electronics and Computer Engineering • Fire Technology and Safety Engineering • Electronics and Telecommunication Engineering • Textile Technology • Textile Chemistry • Fashion and Apparel Engineering
2.	Math-I (Calculus and Linear Algebra)	BSC-MATH-103G	<ul style="list-style-type: none"> • Computer Science Engineering • Information Technology • Computer Science and Information Technology
3.	Math-I (Series, Matrices and Calculus)	BSC-MATH-105G	<ul style="list-style-type: none"> • Bio-Technology Engineering
4.	Math-II (Multivariable Calculus, Differential equations and Complex Analysis)	BSC-MATH-102G	<ul style="list-style-type: none"> • Mechanical Engineering • Electronics and Communication Engineering • Civil Engineering • Electrical Engineering • Electronics and Electrical Engineering • Printing Technology • Automobile Engineering • Mechanical and Automation Engineering • Electronics and Computer Engineering • Fire Technology and Safety Engineering • Electronics and Telecommunication Engineering • Textile Technology • Textile Chemistry

Registrar
Ganga Institute of Tech.
Kabiana, Jhajjar

5.	Math-II (Probability and Statistics)	BSC-MATH-104G	<ul style="list-style-type: none"> • Fashion and Apparel Engineering • Computer Science Engineering • Information Technology • Computer Science and Information Technology
6.	Math-II (Vector Calculus, Differential equations and Laplace Transform)	BSC-MATH-106G	<ul style="list-style-type: none"> • Bio-Technology Engineering

Table 3

Sr. No.	Course Name	Course Code	Branch
1.	Programming for Problem Solving	ESC-CSE101G	<ul style="list-style-type: none"> • Computer Science and Engineering • Electronics and communication Engineering • Information Technology • Computer Science and Information Technology • Electronics and Electrical Engineering
		ESC-CSE102G	For all remaining branches of B.Tech
2.	Programming in C Lab	ESC-CSE103G	<ul style="list-style-type: none"> • Computer Science and Engineering • Electronics and communication Engineering • Information Technology • Computer Science and Information Technology • Electronics and Electrical Engineering
		ESC-CSE104G	For all remaining branches of B.Tech


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

I. Mandatory Induction program

(Please refer **Appendix-A** for guidelines. Details of Induction program also available in the curriculum of Mandatory courses.)

[Induction program for students to be offered right at the start of the first year.]

3 weeks duration

- Physical activity
- Creative Arts
- Universal Human Values
- Literary
- Proficiency Modules
- Lectures by Eminent People
- Visits to local Areas
- Familiarization to Dept./Branch & Innovations



B.Tech. (Computer Science and Engineering)
Common with B.Tech. (Information Technology) &
B.Tech. (Computer Science and Information Technology)
Scheme of Studies/Examination w.e.f. 2019-20
Semester-3

Sr. No.	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L	T	P			Mark of Class work	Theory	Practical	Total	
1	PCC-CSE-201G	Database Management Systems	3	0	0	3	3	25	75		100	3
2	PCC-CSE-203G	Data Structures & Algorithms	3	0	0	3	3	25	75		100	3
3	PCC-CSE-205G	Digital Electronics	3	0	0	3	3	25	75		100	3
4	PCC-CSE-207G	Python Programming	2	0	0	2	2	25	75		100	3
5	BSC-MATH-203G	Mathematics - III (Multivariable Calculus and Differential Equations)	2	0	0	2	2	25	75		100	3
6	HSMC-01G	Economics for Engineers	3	0	0	3	3	25	75		100	3
7	LC-CSE-209G	Database Management Systems LAB	0	0	4	4	2	25		25	50	3
8	LC-CSE-211G	Digital Electronics LAB	0	0	4	4	2	25		25	50	3
9	LC-CSE-213G	Data Structures & Algorithms LAB Using C	0	0	4	4	2	25		25	50	3
10	LC-CSE-215G	Python Programming LAB	0	0	2	2	1	25		25	50	3
Total							23				800	


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

B.Tech. (Computer Science and Engineering)
Common with B.Tech. (Information Technology) &
B.Tech. (Computer Science and Information Technology)
Scheme of Studies/Examination w.e.f. 2019-20
Semester-4

Sr. No.	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L	T	P			Mark of Class work	Theory	Practical	Total	
1	PCC-CSE-202G	Discrete Mathematics	3	1	0	3	4	25	75		100	3
2	PCC-CSE-204G	Computer Organization & Architecture	3	0	0	3	3	25	75		100	3
3	PCC-CSE-206G	Operating System	3	0	0	3	3	25	75		100	3
4	PCC-CSE-208G	Object Oriented Programming	3	0	0	3	3	25	75		100	3
5	HSMC-02G	Organizational Behaviour	3	0	0	3	3	25	75		100	3
6	*MC-106G	Environmental Sciences	3	0	1	4	0	-	-	-	-	3
7	PCC-CSE-210G	Web Technologies	2	0	0	2	1	25	75		100	3
8	LC-CSE-212G	Operating System LAB	0	0	4	4	2	25		25	50	3
9	LC-CSE-214G	Object Oriented Programming LAB Using C++	0	0	4	4	2	25		25	50	3
10.	LC-CSE-216G	Web Technologies Lab	0	0	2	2	1	25		25	50	3
Total							22				750	

*MC-106G is a mandatory non-credit course in which the students will be required passing marks in theory.

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.

Registrar
Ganga Institute of Tech & Mgt
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Computer Science & Engineering) – 5th Semester
w.e.f. 2020-21

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Mark of Class work	Theory	Practical	Total	
1	Engineering Science Course	ESC-CSE-301G	Microprocessor	3	0	0	3	3	25	75		100	3
2	Professional Core Course	PCC-CSE-303G	Computer Networks	3	0	0	3	3	25	75		100	3
3	Professional Core Course	PCC-CSE-305G	Formal Languages & Automata	3	0	0	3	3	25	75		100	3
4	Professional Core Course	PCC-CSE-307G	Design & Analysis of Algorithms	3	0	0	3	3	25	75		100	3
5	Professional Core Course	PCC-CSE-309G	Programming in Java	3	0	0	3	3	25	75		100	3
6	Professional Elective Course	Refer to Annexure I	Elective-I	3	0	0	3	3	25	75		100	3
7	Engineering Science Course	LC-ESC-321G	Microprocessor Lab	0	0	2	2	1	25	-	25	50	3
8	Professional Core Course	LC-CSE-323G	Computer Networks Lab	0	0	3	3	1.5	25	-	25	50	3
9	Professional Core Course	LC-CSE-325G	Design & Analysis of Algorithms Using C++	0	0	3	3	1.5	25	-	25	50	3
10	Professional Core Course	LC-CSE-327G	Programming in Java Lab	0	0	3	3	1.5	25	-	25	50	3
11	Training	PT-CSE-329G	Practical Training-1	-	-	-	-	-	-	-	-	* Refer Note 1	
TOTAL CREDIT								23.5				800	

Note:

- The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical Training.

- Choose any one from Elective-I

Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Computer Science & Engineering) – 6th Semester
w.e.f. 2020-21

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Mark of Class work	Theory	Practical	Total	
1	Professional Core Course	PCC-CSE-302G	Compiler Design	3	0	0	3	3	25	75		100	3
2	Professional Core Course	PCC-CSE-304G	Artificial Intelligence	3	0	0	3	3	25	75		100	3
3	Professional Core Course	PCC-CSE-306G	Advanced Java	3	0	0	3	3	25	75		100	3
4	Engineering Science Course	ESC-CSE-308G	Mobile and Wireless Communication	3	0	0	3	3	25	75		100	3
5	Professional Elective Course	Refer to Annexure II	Elective-II	3	0	0	3	3	25	75		100	3
6	Professional Elective Course	Refer to Annexure III	Elective-III	3	0	0	3	3	25	75		100	3
7	Project	PROJ-CSE-322G	Project-I	0	0	4	4	2	25		25	50	3
8	Professional Core Course	LC-CSE-324G	Compiler Design Lab	0	0	3	3	1.5	25		25	50	3
9	Professional Core Course	LC-CSE-326G	Artificial Intelligence Lab using python	0	0	3	3	1.5	25		25	50	3
10	Professional Core Course	LC-CSE-328G	Advanced Java Lab	0	0	2	2	1	25		25	50	3
11.	Mandatory Courses	MC-317G	Constitution of India	2	0	0							
TOTAL								24				800	

*MC-317G is a mandatory non –credit course in which the students will be required passing marks in theory.

NOTE:

1. At the end of 6th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 7th Semester.
2. Choose any one from Elective-II
3. Choose any one from Elective-III

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

B.Tech (COMPUTER SCIENCE & ENGINEERING)
Scheme of Studies/Examination
Semester 7th
w.e.f. 2021-2022

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Core Course	PCC-CSE-401G	Neural Networks	3	0	0	3	3	25	75		100	3
2	Professional Elective Course	Refer to Annexure IV	Professional Elective –IV	3	0	0	3	3	25	75		100	3
3	Professional Elective Course	Refer to Annexure V	Professional Elective –V	3	0	0	3	3	25	75		100	3
4	Open Elective Course	Refer to Annexure OEC-I	Open Elective –I	3	0	0	3	3	25	75		100	3
5	Professional Core Course	LC-CSE-421G	Neural Networks Lab	0	0	2	2	1	25	-	25	50	3
6	Project	PROJ-CSE-423G	Project-II	0	0	6	6	3	50	-	50	100	3
7	Professional Core Course	PT-CSE-425G	Practical Training-II	0	0	0	1	-	-	-	-	-	-
TOTAL CREDIT								16	175	300	75	550	

NOTE:

1. Practical Training II: The evaluation of Practical Training-II will be based on seminar, viva-voce, report submitted by the students. According to performance, the students will be awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical

Training.

2. Choose one subject from each Professional Elective –IV, Professional Elective –V and Open Elective – I. List of elective subjects is attached as annexures.

Am
 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Annexure IV: Professional Elective -IV

1. PEC-CSE-403G: Software Project Management
2. PEC-CSE-405G: Web Mining
3. PEC-CSE-407G: Predictive Analysis
4. PEC-CSE-409G: Information Hiding Techniques

Annexure V: Professional Elective -V

1. PEC-CSE-411G: Network Security and cryptography
2. PEC-CSE-413G: Software Testing
3. PEC-CSE-415G: Cyber Security Threats
4. PEC-CSE-417G: Advanced Computer Architecture

Annexure OEC-I: Open Elective-I

1. OEC-PHY-101G: Material Science
2. OEC-ECE-451-G: Electronic Principles
3. HSMC-08G: Fundamentals of Management
4. OEC-CE-451-G: Disaster Management
5. HSMC-10G: English for Professionals


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

B.Tech (COMPUTER SCIENCE & ENGINEERING)
Scheme of Studies/Examination
Semester 8th
w.e.f. 2021-2022

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Core Course	PCC-CSE-402G	Machine Learning	3	0	0	3	3	25	75		100	3
2	Professional Core Course	PCC-CSE-404G	Big Data Analytics	3	0	0	3	3	25	75		100	3
3	Open Elective Course	Refer to Annexure OEC-III	Open Elective-II	3	0	0	3	3	25	75		100	3
4	Professional Core Course	LC-CSE-410G	Big Data Analytics Lab	0	0	0	2	1	25		25	50	3
5	Professional Core Course	LC-CSE-412G	Machine Learning with Python Lab	0	0	2	2	1	25		25	50	3
6	Project	PROJ-CSE-422G	Project-III	0	0	8	4	4	50		50	100	3
TOTAL CREDIT								15	175	225	100	500	

NOTE:

Choose one subject from open Elective – II. List of elective subjects is attached as annexure.

Annexure OEC-II: Open Elective-II

1. PEC-ME-410G: Quality Engineering
2. OEC-ECE-430G: Wireless Adhoc and Sensor Networks
3. OEC-ECE-452-G: Intelligent Instrumentation for Engineers
4. OEC-CE- 448G: Traffic Engineering and Road Safety
5. OEC-EE-08G: Conventional and Renewable Energy Resources

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
SCHEME OF STUDIES & EXAMINATIONS
B.TECH (Electronics and Communication Engineering)
 Common with
B.Tech (Electronics and Tele Communication)
SEMESTER –3rd w.e.f. 2019-20

S. No.	Course No.	Course Title	Teaching Schedule			Marks of Class work	Examination Marks		Total	Credit	Duration of Exam	Contact Hrs./wk
			L	T	P		Theory	Practical				
1	PCC-ECE201G	Electronic Devices	3	0	-	25	75	-	100	3	3	3
2	LC-ECE203G	Electronic Devices lab	0	0	2	25	-	25	50	1	3	2
3	PCC-ECE206G	Analog Circuits	3	0	-	25	75	-	100	3	3	3
4	LC-ECE208G	Analog Circuits lab	0	0	2	25	-	25	50	1	3	2
5	PCC-ECE209G	Signals and Systems	3	0	-	25	75	-	100	3	3	3
6	PCC-ECE211G	Network Theory	3	1	-	25	75	-	100	3	3	3
7	LC-ECE-212G	Network Theory Lab	0	0	2	25	-	25	50	1	3	2
8	LC-ECE-213G	PCB & ELECTRONIC WORKSHOP LAB	0	0	2	25	-	25	50	1	3	2
9	HSMC-01G	Economics for Engineers (Common with CSE)	3	0	0	25	75	-	100	3	3	3
10	*MC-106G	Environmental Science	3	0	1	25	75	-	-	-	3	4
Total									700	19		27

*MC-106G is a mandatory non –credit course in which the students will be required passing marks in theory.

Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES & EXAMINATIONS
B.TECH (Electronics and Communication Engineering)

Common with

B.Tech (Electronics and Tele Communication)

SEMESTER –4th w.e.f. 2019-20

S. No.	Course No.	Course Title	Teaching Schedule			Marks of Class work	Examination Marks		Total	Credit	Duration of Exam	Contact Hrs./wk.
			L	T	P		Theory	Practical				
1	PCC-ECE202G	Communication System	3	0	-	25	75	-	100	3	3	3
2	LC-ECE204G	Communication System lab	0	0	2	25	-	25	50	1	3	2
3	PCC-ECE205G	Digital Electronics	3	1	-	25	75	-	100	3	3	4
4	LC-ECE207G	Digital Electronics lab	0	0	2	25	-	25	50	1	3	2
5	PCC-ECE210G	Microcontrollers	3	1	-	25	75	-	100	3	3	4
6	LC-ECE-214G	Microcontrollers Lab	0	0	2	25	-	25	50	1	3	2
7	HSMC-02G	Organizational Behavior	3	0	0	25	75	-	100	3	3	3
8	BSC-MATH-202G	Mathematics-III (Partial differential equations and Numerical methods)	3	1	-	25	75	-	100	4	3	4
9	PCC-CSE-221G	Data Structures	3	0	0	25	75	-	100	3	3	3
Total									750	22		27

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.

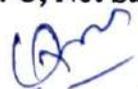
Registered
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Electronics & Communication Engineering) – 5th Semester
w.e.f. 2020-21

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	External Examination	Practical	Total	
1	Professional Core Course	PCC-ECE301G	Electromagnetic Waves	3	1	0	4	4	25	75		100	3
2	Professional Core Course	PCC-ECE303G	Computer Organization & Architecture	3	0	0	3	3	25	75		100	3
3	Professional Core Course	PCC-ECE305G	Communication Engineering	3	1	0	4	4	25	75		100	3
4	Professional Core Course	PCC-ECE307G	Digital Signal Processing	3	1	0	4	4	25	75		100	3
5	Program Elective Course	Refer to Annexure I	Program Elective –I	3	1	0	4	4	25	75		100	3
6	Open Elective Course	Refer to Annexure I	Open Elective-I	3	0	0	3	3	25	75		100	3
7	Professional Core Course	LC-ECE323G	Electromagnetic Waves Lab	0	0	3	3	1.5	25		25	50	3
8	Professional Core Course	LC-ECE325G	Digital Signal Processing Lab	0	0	3	3	1.5	25		25	50	3
9	Training	PT-ECE327G	Practical Training – 1	-	-	-	-	-	-	-	* Refer Note 1		
TOTAL CREDIT								25				700	

Note:

- The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical Training.
 - Choose any one from Elective-I
 - Choose any one from open Elective-I
- Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.**


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Annexure I

Elective -I

PEC-ECE309G	Power Electronics
PEC-ECE311G	Nano electronics
PEC-ECE313G	Linear IC Applications
PEC-ECE315G	Scientific computing

Open Elective-I

OEC-ECE317G	Object Oriented Programming with C++
OEC-ECE319G	Additive Manufacturing
OEC-ECE321G	Measurements and Instrumentation


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Electronics & Communication Engineering) – 6th Semester
w.e.f. 2020-21

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	External Examination	Practical	Total	
1	Professional Core Course	PCC-ECE302G	Control Systems	3	1	0	4	4	25	75		100	3
2	Professional Core Course	PCC-ECE304G	Computer Network	3	1	0	4	4	25	75		100	3
3	Humanities/ Basic Science	HUM-ECE-306G	Engineering Ethics	3	0	0	3	3	25	75		100	3
4	Professional Core Course	PCC-ECE308G	CMOS Design	3	1	0	4	4	25	75		100	3
5	Program Elective Course	Refer to Annexure II	Program Elective –II	3	1	0	4	4	25	75		100	3
6	Open Elective Course	Refer to Annexure II	Open Elective-II	3	0	0	3	3	25	75		100	3
7	Professional Core Course	LC-ECE322G	Computer Network Lab	0	0	4	4	2	25		25	50	3
8	Professional Core Course	LC-ECE324G	Control System Lab	0	0	3	3	1.5	25		25	50	3
9	Professional Core Course	LC-ECE326G	Mini Project/Electronic Design workshop	0	0	4	4	2	25		25	50	3
TOTAL CREDIT								27.5				750	

Note:

1. Each student has to undergo practical training of 6 weeks during summer vacation after 6th semester and its evaluation shall be carried out in 7th Semester.
2. Choose any one from Elective-II
3. Choose any one from Open Elective-II


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Annexure II

Elective –II

PEC-ECE310G	Bio-Medical Electronics
PEC-ECE312G	VHDL and Digital Design
PEC-ECE314G	Introduction to MEMS
PEC-ECE316G	Speech and Audio Processing

Open Elective-II

OEC-ECE318G	Python Programming
OEC-ECE320G	Probability and Stochastic Processes


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
SCHEME OF STUDIES & EXAMINATIONS
B.TECH (Electronics and Communication Engineering)

Common with (Electronics and Telecommunication Engineering)

SEMESTER –7th w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Elective Course	Refer to Annexure-I	Professional Elective-III	3	3	0	6	3	25	75	-	100	3
2	Professional Core Course	PCC-ECE-401G	Fiber Optic Communication	3	3	0	6	3	25	75	-	100	3
3	Professional Core Course	PCC-ECE-402-G	Antenna and Wave Propagation	3	3	0	6	3	25	75	-	100	3
4	Professional Elective Course	Refer to Annexure-I	Professional Elective-IV	3	3	0	6	3	25	75	-	100	3
5	Professional Elective Course	Refer to Annexure-I	Professional Elective-V	3	3	0	6	3	25	75	-	100	3
7	Mandatory Course	MC-317-G	Constitution of India	2	0	0	2	Refer Note:1 (Grading)					
8	LAB	LC-ECE-405-G	Data Communication Networking Lab	0	0	2	2	1.5	25	-	25	50	3
9	Project	PROJ-ECE-407-G	Project Stage-I			4	4	5	50	-	100	150	3
TOTAL CREDIT								21.5	200	375	125	700	

Note:

1. The students will be awarded grades A, B, C & F in Evaluation of Constitution of India. A student who is awarded 'F' grade is required to repeat.

Excellent: A; Good: B; Satisfactory: C; Not Satisfactory: F.

2. Choose any one subject from Elective-III.
3. Choose any one subject from Elective-IV.
4. Choose any one subject from Elective-V.

(Signature)
 Registrar
 Ganga Institute of Tech. & Mgt
 Kablana, Jhajjar

Annexure I

Professional Elective-III

S. No.	Course Code	Course Title
1	PEC-ECE-409-G	Wireless Communication
2	PEC-ECE-410-G	Mobile Communication and Networks

Professional Elective-IV

S. No.	Course Code	Course Title
1	PEC-ECE-411-G	Data Communication Networking & Security
2	PEC-ECE-412-G	Error Correcting Codes

Professional Elective-V

S. No.	Course Code	Course Title
1	PEC-ECE-413-G	Wireless Sensor Networks
2	PEC-ECE-414-G	Radar and Sonar Engineering
3	PEC-ECE-401-G	Telecommunication and Switching Networks


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
SCHEME OF STUDIES & EXAMINATIONS
B.TECH (Electronics and Communication Engineering)
Common with (Electronics and Telecommunication Engineering)
SEMESTER –8th w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Elective Course	Refer to Annexure-II	Professional Elective-VI	3	3	0	6	3	25	75	-	100	3
2	Professional Core Course	PCC-ECE-403-G	Satellite Communication	3	3	0	6	3	25	75	-	100	3
3	Professional Core Course	PCC-ECE-404-G	Microwave theory and techniques	3	3	0	6	3	25	75	-	100	3
5	Professional Core Course	LC-ECE-406-G	Wireless & Satellite Communication Lab	0	0	2	2	1.5	25	-	25	50	3
6	Open Elective Course	Refer to Annexure-III	Open Elective	3	0	0	6	3	25	75	-	100	3
7	Project	PROJ-ECE-408-G	Project Work II/ Dissertation	-	-	8	8	6	100	-	150	250	3
TOTAL CREDIT								19.5	225	300	175	700	

Note:

1. Choose any one subject from Elective-VI.
2. Choose any one subject from Open Elective


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Annexure-II

Professional Elective-VI

S. No.	Course Code	Course Title
1	PEC-ECE-415-G	Embedded System
2	PEC-ECE-416-G	High speed Electronics
3	PEC-ECE-421-G	Mixed Signal Design

Annexure-III

Open Elective Courses-I

S. No.	Course Code	Course Title
1	OEC-ECE-417-G	Renewable Energy Resources
2	OEC-ME-455-G	Composite Materials
3	OEC-BME-419-G	Biosensors
4.	OEC-CE-417-G	Disaster Management
5.	OEC-CE-402-G	Solid & Hazardous waste management
6.	OEC-ME-410-G	Quality Engineering
7.	OEC -ME-402G	Operations Research
8.	OEC -EE-412G	Electrical Power Generation


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester III (Second Year)

B.Tech (MECHANICAL ENGINEERING)w.e.f. 2019-20

Sr. No.	Category Course Notation	Course Code	Course Title	Hours per week			Total Contact hrs/w week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Mark of Class work	Theory	Practical	Total	
1	Basic Science course	BSC-ME-201G	Physics II(Optics & Waves)	3	0	0	3	3	25	75		100	3
2	Basic Science course	BSC-ME-203G	Mathematics-III	3	1	0	4	4	25	75		100	3
3.	Basic Science course	BSC-BIO-205G	Biology	2	1	0	3	3	25	75		100	3
4.	Engineering Science course	ESC-ECE-207G	Basics of Electronics Engg.	2	0	0	2	2	25	75		100	3
5.	Engineering Science course	ESC-ME-209G	Engineering Mechanics	3	0	0	3	3	25	75		100	3
6.	Engineering Science course	ESC-ME-211G	Basics of Mechanical Engg.	2	0	0	2	2	25	75		100	3
7.	Professional Core courses	PCC-ME-213G	Thermodynamics	3	1	0	4	4	25	75		100	3
8.	Engineering Science course	LC-ME-215G	Basics of Mechanical Engg. lab	0	0	2	2	1	25		25	50	3
TOTAL CREDIT								22				750	


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester IV (Second Year)
B.Tech.(MECHANICAL ENGINEERING)w.e.f. 2019-20

Sr. No.	Category Course Notation	Course Code	Course Title	Hours per week			Total Contact hrs/wk	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Mark of Class work	Theory	Practical	Total	
1	Professional Core courses	PCC-ME-202G	Applied Thermodynamics	3	1	0	4	4	25	75		100	3
2	Professional Core courses	PCC- ME-204G	Fluid Mechanics	3	1	0	4	4	25	75		100	3
3	Professional Core courses	PCC- ME-206G	Strength of materials	3	1	0	4	4	25	75		100	3
4	Professional Core courses	PCC- ME-208G	Materials Engineering	3	0	0	3	3	25	75		100	3
5	Professional Core courses	PCC- ME-210G	Instrumentation & Control	3	0	0	3	3	25	75		100	3
6	Professional Core courses	LC- ME-212G	Applied Thermodynamics Lab	0	0	2	2	1	25		25	50	3
7	Professional Core courses	LC- ME-214G	SOM Lab	0	0	2	2	1	25		25	50	3
8	Professional Core courses	LC- ME-216G	Fluid Mechanics Lab	0	0	2	2	1	25		25	50	3
9	Professional Core courses	LC- ME-218G	Materials Lab	0	0	2	2	1	25		25	50	3
10	Professional Core courses	LC- ME-220G	Instrumentation Lab	0	0	2	2	1	25		25	50	3
11	Mandatory course	*MC-106G	Environment Science	3	0	1	-		25	75		-	4
TOTAL CREDIT								23				750	

*MC-106G is a mandatory non –credit course in which the students will be required passing marks in theory.

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.



Registrar

Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Mechanical Engineering) – 5th Semester
w.e.f. 2020-21

S. N.	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L	T	P			Internal Assessment	External Examination	Practical	Total	
1	PCC-ME-301G	Computer Aided Design & Manufacturing	3	0	0	0	3	25	75		100	3
2	PCC- ME-303G	Solid Mechanics	3	1	0	4	4	25	75		100	3
3	PCC- ME-305G	Manufacturing Technology-I	3	0	0	3	3	25	75		100	3
4	PCC- ME-307G	Kinematics of Machine	3	0	0	3	3	25	75		100	3
5	PCC- ME-309G	Fluid Machines	3	0	0	3	3	25	75		100	3
6	OEC/HSMC-I	Refer List -I	2	0	0	2	2	25	75		100	3
7	LC-ME-311G	Computer Aided Design & Manufacturing Lab	0	0	2	2	1	25		25	50	3
8	LC-ME-313G	Fluid Machines Lab	0	0	2	2	1	25		25	50	3
9	LC-ME-315G	Kinematics of Machine Lab	0	0	2	2	1	25		25	50	3
10	PT-ME-317G	Practical Training-I	0	0	2	2	0					3
11	MC-315G	Essence of Indian Traditional knowledge										
TOTAL							21				750	

Note:

- The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical Training.

Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

OPEN ELECTIVE COURSES (OEC)/ HUMANITIES AND SOCIAL SCIENCES INCLUDING MANAGEMENT COURSES (HSMC)-LIST-I

LIST-I (Semester -V)

S. No.	Code	Name of Course	No. of Contact Hours	Credits
1.	HSMC-01G	Economics For Engineers	2	2
2.	HSMC-03G	Finance and Accounting	2	2
3.	OEC –ME-301G	Air and Noise Pollution and Control	2	2
4.	OEC –ME-303G	Installation Testing & Maintenance of Electrical Equipments	2	2
5.	OEC –ME-305G	Microprocessor and Interfacing	2	2

Note: Students have to select any one subject from the above list of courses.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Mechanical Engineering) – 6th Semester
w.e.f. 2020-21

S. N.	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L	T	P			Internal Assessment	External Examination	Practical	Total	
1	PCC-ME-302G	Manufacturing Technology-II	3	0	0	3	3	25	75		100	
2	PCC- ME-304G	Design of machine element-I	3	0	0	3	3	25	75		100	
3	PCC- ME-306G	Heat Transfer	3	1	0	4	4	25	75		100	
4	PCC- ME-308G	Dynamics of Machines	3	0	0	3	3	25	75		100	
5	LC-ME-310G	Workshop Lab-I	0	0	3	3	1.5	25		25	50	
6	LC-ME-312G	Workshop Lab-II	0	0	2	2	1	25		25	50	
7	LC-ME-314G	Heat Transfer Lab	0	0	2	2	1	25		25	50	
8	LC-ME-316G	Dynamics of Machines Lab	0	0	2	2	1	25		25	50	
9	PCC-ME-318G	Seminar	0	0	2	2	1	50			50	
10	PEC	Professional Elective Courses(PEC): Refer List -I	3	0	0	3	3	25	75		100	
11	HSMC-II	Refer List -II	2	0	0	2	2	25	75		100	
TOTAL							23.5				850	

NOTE:

1. Each student has to undergo practical training of 4/6 weeks during summer vacation and its evaluation shall be carried out in the VII semester.
2. Assessment of Practical Training-II, undergone at the end of VI semester, will be based on seminar, viva-voce, report and certificate of practical training obtained by the student from the industry/ Professional organization/ Research Laboratory etc. According to performance letter grades A, B, C, F are to be awarded:

Excellent: A; Good : B; Satisfactory:C; notsatisfactory: F.

A student who has been awarded 'F' grade will be required to repeat the practical training.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

PROFESSIONAL ELECTIVE COURSES (PEC) (Semester-VI) LIST-I

S. No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-320G	Internal Combustion Engines & Gas Turbines	3	3
2.	PEC-ME-322G	Welding Technology	3	3
3.	PEC-ME-324G	Air Craft Technology	3	3
4.	PEC-ME-326G	Reliability, Availability & Maintainability	3	3

Note: Students will have to select any one out of the list.

HUMANITIES AND SOCIAL SCIENCES INCLUDING MANAGEMENT COURSES (HSMC)-LIST-II.

List-II (Semester-VI)

S. No.	Code	Name of Course	No. of Contact Hours	Credits
1.	HSMC -02G	Organizational Behaviour	2	2
2.	HSMC -04G	Human Resource Management	2	2
3.	HSMC -06G	Industrial Psychology	2	2
4.	HSMC -08G	Fundamentals of Management	2	2

Note: Students have to select any one subject from the above list of courses.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Studies and Examination B.TECH (Mechanical Engineering) – 7th Semester

w.e.f. 2021-22 (Scheme-G)

Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
		L	T	P			Internal Assessment	External Examination Theory	Practical	Total	
PEC	Professional Elective Courses(PEC): Refer List-II	3	0	0	3	3	25	75		100	3
PCC-ME-401G	Design of Machine Element-II	3	0	0	3	3	25	75		100	3
PCC-ME-403G	Entrepreneurship Development	3	0	0	3	3	25	75		100	3
PEC	Professional Elective Courses(PEC): Refer List-III	3	0	0	3	3	25	75		100	3
LC-ME-403G	Workshop Lab-III	0	0	2	2	1	25		25	50	3
PCC-ME-405G	Seminar	0	0	2	2	1	25		25	50	3
PROJ-ME-407G	Project-I	0	0	9	9	4.5	25		25	50	3
PT-ME-409G	Practical Training-II	0	0	2	2	Refer Note:1 (Grading)					
MC-317G	Constitution of India	2	0	0	2	Refer Note:2 (Grading)					
TOTAL CREDIT						18.5	175	300	75	550	3

Note: 1. The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat.

Practical Training. Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.

Note: 2 The students will be awarded grades A, B, C & F in Evaluation of Constitution of India. A student who is awarded 'F' grade is required to repeat.

Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.

3. Choose any one subject from Professional Elective Courses(PEC) (Semester-VII) LIST-II and LIST-III


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VII) LIST-II

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-401G	Refrigeration & Air Conditioning	3	3
2.	PEC-ME-403G	Project Management	3	3
3.	PEC-ME-405G	Numeric Control of Machine Tools and Robotics	3	3
4.	PEC-ME-407G	Finite Element Analysis	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VII) LIST-III

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-409G	Noise and Vibrations	3	3
2.	PEC-ME-411G	Solar Energy Engineering	3	3
3.	PEC-ME-413G	Tribology	3	3
4.	PEC-ME-415G	Composite Materials	3	3

Note: Students will have to select any one out of the list.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Studies and Examination B.TECH (Mechanical Engineering) – 8th Semester

w.e.f. 2021-22(Scheme-G)

Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
		L	T	P			Internal Assessment	External Examination Theory	Practical	Total	
PCC-ME-402G	Industrial Automation	3	0	0	3	3	25	75		100	3
PEC	Professional Elective Courses(PEC): Refer List-IV	3	0	0	3	3	25	75		100	3
PEC	Professional Elective Courses(PEC): Refer List-V	3	0	0	3	3	25	75		100	3
PEC-	Professional Elective Courses(PEC): Refer List-VI	3	0	0	3	3	25	75		100	3
OEC/HSMC-III	Refer OEC List-III	3	0	0	3	3	25	75		100	3
LC- ME-404G	Workshop Lab-IV	0	0	2	2	1	25		25	50	3
PCC-ME-406G	Seminar	0	0	2	2	1	25		25	50	3
PROJ-ME-408G	Project-II	0	0	10	10	5	25		25	50	3
TOTAL CREDIT						22	200	375	75	650	

1. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII) LIST-IV
2. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII LIST-V
3. Choose any one subject from Professional Elective Courses(PEC) (Semester-VIII LIST-VI.
4. Choose any one subject from Open Elective Courses(OEC)/ Humanities and Social Sciences Including Management Courses (HSMC)- (Semester VIII)-LIST-III


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

PROFESSIONAL E ELECTIVE COURSES(PEC) (Semester-VIII) LIST-IV

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-402G	Tool Design	3	3
2.	PEC-ME-404G	Plant Maintenance Engg.	3	3
3.	PEC-ME-406G	Design and Optimization of Thermal Energy Systems	3	3
4.	PEC-ME-408G	Gas Dynamics and Jet Propulsion	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester- VIII) LIST-V

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-412G	Power Plant Engineering	3	3
2.	PEC-ME-414G	Product Design and Development	3	3
3.	PEC-ME-416G	Non Conventional Energy Resources Utilization	3	3
4.	PEC-ME-418G	Introduction to Nanoscience and Nanotechnology	3	3

Note: Students will have to select any one out of the list.

PROFESSIONAL ELECTIVE COURSES(PEC) (Semester-VIII) LIST-VI

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	PEC-ME-420G	Automobile Engineering	3	3
2.	PEC-ME-422G	Design of Transmission Systems	3	3
3.	PEC-ME-424G	Alternate Fuels and Energy Systems	3	3
4.	PEC-ME-426G	Optimisation for Engineering Design	3	3

Note: Students will have to select any one out of the list.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

OPEN ELECTIVE COURSES(OEC)/ HUMANITIES AND SOCIAL SCIENCES INCLUDING MANAGEMENT COURSES (HSMC)-LIST-III

Students have to select any one Open Elective Course-I from the list of courses.

List-III (Semester VIII)

S.No.	Code	Name of Course	No. of Contact Hours	Credits
1.	OEC-ME-402G	Operation Research	3	3
2.	OEC-ME-410G	Quality Engineering	3	3
3.	OEC-EE-412G	Electrical Power Generation	3	3
4.	OEC-CSE-430G	Computer Communication	3	3
5.	OEC-CE- 448G	Traffic Engineering and Road Safety	3	3
6.	OEC-CE- 450G	Disaster Management	3	3
7.	OEC-ECE-453G	Microprocessor Application in Automobiles Sector	3	3
8.	HSMC-10G	Management Information Systems	3	3

Note: Students will have to select any one out of the list.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATION

Bachelor of Technology (Civil Engineering) Scheme effective from 2019-20

SEMESTER 3rd

Sr. No	Course Code	Course Title	Hours per week	Contact hours per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L-T-P			Class work	Theory	Practical	Total	
1.	HSMC-201-G	Economics For Engineers	2-0-0	2	2	25	75	-	100	3
2.	PCC-201-G	Introduction to Civil Engineering	2-0-0	2	2	25	75	-	100	3
3.	BSC-Math-205-G	Mathematics III	2-1-0	3	3	25	75	-	100	3
4.	PCC-203-G	Engineering Mechanics	3-1-0	4	4	25	75	-	100	3
5.	*MC-106-G	Environmental Science	3-0-1	4	0	25	75	-	--	3
6.	PCC-CE-205-G	Fluid Mechanics	2-1-0	3	3	25	75	-	100	3
7.	PCC-CE-207-G	Surveying	2-1-0	3	3	25	75	-	100	3
8.	LC-CE-209-G	Building Drawing lab	0-0-2	2	1	25	-	25	50	3
9.	LC-CE-211-G	Engineering Mechanics Lab.	0-0-2	2	1	25	-	25	50	3
10.	LC-CE-213-G	Fluid Mechanics Lab.	0-0-2	2	1	25	-	25	50	3
11.	LC-CE-215-G	Surveying Lab.	0-0-2	2	1	25	-	25	50	3
TOTAL					21					

MC-106G is a mandatory non –credit course in which the students will be required passing marks in theory.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATION

Bachelor of Technology (Civil Engineering) Scheme effective from 2019-20

SEMESTER 4th

Sr. No.	Course Code	Course Title	Hours per week	Contact hours per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
						Class work	Theory	Practical	Total	
1.	HSMC-202-G	Organization Behavior	3-0-0	3	3	25	75	-	100	3
2.	PCC-CE-202-G	Hydraulic engineering	3-1-0	4	4	25	75	-	100	3
3.	PCC-CE-204-G	Design of concrete structure	3-1-0	4	4	25	75	-	100	3
4.	PCC-CE-206-G	Structural Analysis	2-1-0	3	3	25	75	-	100	3
5.	PCC-CE-208-G	Geomatics & Aerial surveying	3-1-0	4	4	25	75	-	100	3
6.	PCC-CE-210-G	Material Testing & Evaluation	3-0-0	3	3	25	75	-	100	3
7.	LC-CE-212-G	Hydraulic engineering lab	0-0-2	2	1	25	-	25	50	3
8.	LC-CE-214-G	Structural Analysis Lab	0-0-2	2	1	25	-	25	50	3
9.	LC-CE-216-G	Geomatics & Aerial surveying Lab.	0-0-2	2	1	25	-	25	50	3
10.	LC-CE-218-G	Material Testing & Evaluation Lab.	0-0-2	2	1	25	-	25	50	3
TOTAL					25					

Note:

- Students will be allowed to use non-programmable scientific calculator. However, sharing of Calculator and other materials will not be permitted in the examination.
- (A) each student has to undergo practical training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc and its evaluation shall be carried out in the V semester on the basis of seminar, viva-voce, report and certificate of practical training obtained by the student.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATION

Bachelor of Technology (Civil Engineering) Scheme effective from 2020-21

SEMESTER 5th

Sr. No.	Course Code	Course Title	Hours per Week	Contact Hours per Week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L-T-P			Class work	Theory	Practical	Total	
1.	PCC-CE-301-G	Hydrology and Water Resource Engineering	2-1-0	3	3	25	75	-	100	3
2.	PCC-CE-303-G	Highway Engineering-I	2-1-0	3	3	25	75	-	100	3
3.	PCC-CE-305-G	Soil Mechanics	3-1-0	4	4	25	75	-	100	3
4.	PCC-CE-307-G	Water Supply and Treatment	2-1-0	3	3	25	75	-	100	3
5.	PCC-CE-309-G	Design of Steel Structure	3-1-0	4	4	25	75	-	100	3
6.	PCC-CE-311-G	Engineering Geology	2-1-0	3	3	25	75	-	100	3
7.	LC-CE-313-G	Highway Engineering –I Lab.	0-0-2	2	1	25	-	25	50	3
8.	LC -CE-315-G	Soil Mechanics Lab.	0-0-2	2	1	25	-	25	50	3
9.	LC -CE-317-G	Design of Steel Structure Drawing lab	0-0-2	2	1	25	-	25	50	3
10.	LC -CE-319-G	Engineering Geology Lab.	0-0-2	2	1	25	-	25	50	3
11.	PROJ-CE-301-G	Survey camp	-	-	2	25	-	25	50	-
12.	PROJ-CE-303-G	*Practical Training- I	-	-	-	-	-	-	* Refer note 2	
TOTAL					26					

Note:

- Students will be allowed to use non-programmable scientific calculator. However, sharing of Calculator and other materials will not be permitted in the examination.
- The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded to grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical Training.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Karkhana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATION

Bachelor of Technology (Civil Engineering) Scheme effective from 2020-21

SEMESTER 6th

Sr. No.	Course Code	Course Title	Hours per Week	Contact Hours per Week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
			L-T-P			Class work	Theory	Practical	Total	
1.	PCC-CE-302-G	Irrigation Engineering	3-1-0	4	4	25	75	-	100	3
2.	PCC-CE-304-G	Foundation Engineering	3-1-0	4	4	25	75	-	100	3
3.	PCC-CE-306-G	Highway Engineering-II	3-1-0	4	4	25	75	-	100	3
4.	-	*Elective-I	2-1-0	3	3	25	75	-	100	3
5.	-	**Elective-II	3-1-0	4	4	25	75	-	100	3
6.	LC-CE-308-G	Environmental Engineering Lab.	0-0-2	2	1	25	-	25	50	3
7.	LC-CE-310-G	Foundation Engineering lab	0-0-2	2	1	25	-	25	50	3
8.	LC-CE-312-G	Highway Engineering-II Lab.	0-0-2	2	1	25	-	25	50	3
9.	ESC-302-G	Computer aided Civil Engineering Design	1-0-2	3	2	25	-	25	50	3
TOTAL					24					

	Course Title	Course Code
*Elective -I	1. Waste Water Treatment	PEC-CEEL -302 G
	2. Air & Noise Pollution Control	PEC-CEEL -304 G
	3. Environmental Impact Assessment	PEC-CEEL -306 G
**Elective -II	1. Advanced Concrete Structure	PEC-CEEL -308 G
	2. Pre-Stressed Concrete	PEC-CEEL -310 G
	3. Repair & Rehabilitation Of Structure	PEC-CEEL -312 G

Note:

- Students will be allowed to use non-programmable scientific calculator. However, sharing of Calculator and other materials will not be permitted in the examination.
- Each student has to undergo practical training of 6 weeks during summer vacation and its evaluation shall be carried out in the VII semester.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Ihajjar

Scheme of Studies and Examination
B.Tech. (Civil Engineering) – 7th Semester
w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Core course	PCC-CE-401G	Construction planning and management	2	1	0	3	3	25	75	-	100	3
2	Professional Core course	PCC-CE-403G	Advanced steel structure	2	1	0	3	3	25	75	-	100	3
3	Professional Core course	PCC-CE-405G	Design of Hydraulic Structures	2	1	0	3	3	25	75	-	100	3
4	Professional Elective course	*	Elective III (Refer List-I)	2	1	0	3	3	25	75	-	100	3
5	Professional Elective course	**	Elective IV (Refer List-II)	2	1	0	3	3	25	75	-	100	3
6	Professional Elective course	***	Elective V (Refer List-III)	2	1	0	3	3	25	75	-	100	3
7	Practical Training	PT-CE-425G	Industrial training viva						Refer Note 1*				-
8	Project	PROJ-CE-427G	Project work-I	0	0	6	6	3	50		50	100	3
TOTAL								21	200	450	50	700	

Note:

- The valuation of Industrial training viva (PT-CE-425G) will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Industrial training.

Excellent:A; Good:B; Satisfactory: C; Not Satisfactory: F

- *Choose any one subject from LIST I.
- **Choose any one subject from LIST II.
- ***Choose any one subject from LIST III.

(Signature)
 Registrar
 Ganga Institute of Tech. & Mgt.
 Jablana, Jhajjar

ELECTIVE- III (PEC) –LIST I

S.no	Name of course	Code	L-T-P	Credits
1.	Disaster Management and Mitigation	PEC-CEEL – 407 G	2-1-0	3
2.	Environmental Management	PEC-CEEL - 409 G	2-1-0	3
3.	Hydro Power Engineering	PEC-CEEL - 411 G	2-1-0	3

ELECTIVE- IV(PEC) –LIST II

S.no	Name of course	Code	L-T-P	Credits
1.	Ground water engineering	PEC-CEEL - 413 G	2-1-0	3
2.	Watershed Management	PEC-CEEL –415 G	2-1-0	3
3.	River Engineering	PEC-CEEL –417 G	2-1-0	3

ELECTIVE- V(PEC) –LIST III

S.no	Name of course	Code	L-T-P	Credits
1.	Railway and Airport Engineering	PEC-CEEL -419 G	2-1-0	3
2.	Traffic Engineering	PEC-CEEL -421 G	2-1-0	3
3.	Bridge Engineering	PEC-CEEL -423 G	2-1-0	3


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.Tech. (Civil Engineering)– 8th Semester
w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Core course	PCC-CE-402G	Estimation, Costing and Valuation	2	1	0	3	3	25	75	-	100	3
2	Professional Elective course	*	Elective –VI (Refer List-IV)	2	1	0	3	3	25	75	-	100	3
3	Professional Elective course	**	Elective –VII (Refer List-V)	2	1	0	3	3	25	75	-	100	3
4	Open elective course	***	Open elective-I (Refer List-VI)	3	0	0	3	3	25	75	-	100	3
5	Seminar	S-CE-418G	Seminar	0	0	2	2	1	25	-	-	25	-
6	Mandatory courses (non-credit)	MC-317G*	Constitution of India	2	0	0	2	-	Refer Note 1*				
7	Project	PROJ- CE-420-G	Project work-II	0	0	8	8	4	75		75	150	3
TOTAL								17	200	300	75	575	

***Note: 1.** MC-317G is a mandatory non-credit course in which the students will be awarded grades A, B, C, F as per their performance. A: Excellent, B: Good, C: Satisfactory, F: Not Satisfactory.

A student who is awarded 'F' grade is required to repeat course.

2. *Choose any one subject from LIST IV
3. **Choose any one subject from LIST V
4. ***Choose any one subject from LIST VI


 Registrar
 Ganga Institute of Tech. & Mgt.
 12-1, Dina, Jhajjar

ELECTIVE-VI (PEC) –LIST IV

S.no	Name of course	Code	L-T-P	Credits
1.	Ground Improvement Techniques	PEC-CEEL -404G	2-1-0	3
2.	Rock Mechanics	PEC-CEEL -406G	2-1-0	3
3.	Geotechnology	PEC-CEEL -408G	2-1-0	3

ELECTIVE-VII (PEC) –LIST V

S.no	Name of course	Code	L-T-P	Credits
1.	Advanced Structure Analysis	PEC-CEEL - 410G	2-1-0	3
2.	Finite Element Method	PEC-CEEL -412G	2-1-0	3
3.	Structural dynamics	PEC-CEEL -414G	2-1-0	3

OPEN ELECTIVE COURSES -I (OEC) – LIST VI

S.no	Code	Name of course	L-T-P	Credits
1.	OEC-PHY-101G	Material Science	3-0-0	3
2.	OEC-CH-401G	Chemistry-II (Chemical Applications)	3-0-0	3
3.	OEC –ME-402G	Operation Research	3-0-0	3
4.	OEC-ME-410G	Quality Engineering	3-0-0	3
5.	OEC –EE-412G	Electrical Power Generation	3-0-0	3
7.	OEC-CE-416G	Solid and Hazardous waste management	3-0-0	3
8.	OEC-ECE-451G	Electronic Principles	3-0-0	3
9.	OEC-ECE-452G	Intelligent Instrumentation for Engineers	3-0-0	3
10.	OEC-CSE-430G	Computer Communication	3-0-0	3


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester III (Second Year)

B.TECH (FIRE TECHNOLOGY AND SAFETY) w.e.f. 2019-20

S N	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Mark of Class work	TH	Pr	Tot al	
1	Basic Science Course	BSC-FT- 201G	Mathematics-III	3	1	0	4	4	25	75		100	3
2	Professional Core Courses	PCC-FT- 203G	Basics of Fire Science	3	0	0	3	3	25	75		100	3
3	Professional Core Courses	PCC-FT- 205G	Fire Service Hydraulics-I	3	1	0	4	4	25	75		100	3
4	Engineering Science Course	ESC-FT- 207G	Basics of Thermal Engineering	3	1	0	4	4	25	75		100	3
5	Professional Core Courses	PCC-FT- 209G	Automobile Safety	3	1	0	4	4	25	75		100	3
6	Professional Core Courses	PCC-FT- 211G	Fire Protection Workshop	0	0	2	2	1	25		25	50	3
7	Professional Core Courses	PCC-FT- 213G	Automobile Safety Lab	0	0	2	2	1	25		25	50	3
8	Engineering Science Course	ESC-FT- 215G	Basics Thermal Engineering Lab	0	0	2	2	1	25		25	50	3
9	Training	PT-FT- 217 G	Fire Ground Operation-I	0	0	2	2	1	25		25	50	3
TOTAL CREDIT								23				700	


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Scheme of Examination for Semester IV (Second Year)

B.TECH (FIRE TECHNOLOGY AND SAFETY) w.e.f. 2019-20

SN	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)			Duration of Exam (Hours)
				L	T	P			Marks of Class work	TH	Pr	
1	Humanities and Social science including Management courses	HSMC-FT-202G	Principles of Management & Organisation Behaviour	3	0	0	3	3	25	75	100	3
2	Engineering Science Course	ESC-FT-204G	Basics of Safety Engineering	3	0	0	3	3	25	75	100	3
3	Professional Core Courses	PCC-FT-206G	First Aid & Paramedics	3	1	0	4	4	25	75	100	3
4	Professional Core Courses	PCC-FT-208G	Fire Service Hydraulics-II	3	1	0	4	4	25	75	100	3
5	Professional Core Courses	PCC-FT-210G	Safety in Construction	3	1	0	4	4	25	75	100	3
6	Professional Core Courses	PCC-FT-212G	First Aid & Paramedics Lab	0	0	2	2	1	25	25	50	3
7	Professional Core Courses	PCC-FT-214G	Fire Service Hydraulics Lab	0	0	2	2	1	25	25	50	3
8	Training	PT -FT-216 G	Fire Ground Operation-II	0	0	2	2	1	25	25	50	3
9	Mandatory Course	*MC-106 G	Environmental Science	3	0	1			25	75		4
TOTAL CREDIT								21			650	

Abbreviations: TH- Theory , PR- Practical

MC-106 G is a mandatory non –credit course in which the students will be required passing marks in theory.

NOTE: At the end of 4th semester each student has to undergo Practical Training of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ training centre etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 5th Semester.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Bahadurgarh, Jhajjar

Scheme of Studies and Examination
B.TECH (Fire Technology and Safety) – 5th Semester
w.e.f. 2020-21

S N	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Dura tion of Exam (Hou rs)
				L	T	P			Interna l Assess ment	Ext ernal Ex ami nation	Pr	Total	
1	Professional Core Courses	PCC-FT- 301 G	Building Construction & Urban Planning	3	1	0	4	4	25	75		100	3
2	Professional Core Courses	PCC-FT- 303 G	Mechanics of Structure	3	1	0	4	4	25	75		100	3
3	Professional Core Courses	PCC-FT- 305 G	Passive Measures for Fire Safety	3	1	0	4	4	25	75		100	3
4	Professional Elective Courses	—	Elective-I	3	0	0	3	3	25	75		100	3
5	Professional Elective Courses	—	Elective -II	3	0	0	3	3	25	75		100	3
6	Professional Core Courses	PCC-FT- 307G	Mechanics of Structure Lab	0	0	2	2	1	25		25	50	3
7	Seminar	PR-FT- 309G	Industrial Seminar-I	0	0	2	2	1	50			50	3
8	Training	PR-FT - 311G	Fire Ground Operation-III	0	0	2	2	1	25		25	50	3
9	Mandatory Course	MC- 315-G	Essence of Indian Traditional Knowledge	2	0	0							3
TOTAL								21				650	

Note:

1. Choose any one from Elective-I
2. Choose any one from Elective-II


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Fire Technology and Safety) – 6th Semester
w.e.f. 2020-21

S N	Category	Course Code	Course Title	Hours per week			Total Contact hrs/week	Credit	Examination Schedule (Marks)				Dura tion of Exam (Hou rs)
				L	T	P			Internal Assess ment	Ext ernal Exa min atio n	Pr	Total	
1	Professional Core Courses	PCC-FT- 302 G	Rescue Equipment and Techniques	3	1	0	4	4	25	75		100	3
2	Professional Core Courses	PCC-FT- 304G	Fire Protection and Salvage Operation	3	0	0	3	3	25	75		100	3
3	Professional Elective Courses	—	Elective-III	3	0	0	3	3	25	75		100	3
4	Professional Elective Courses	—	Elective-IV	3	0	0	3	3	25	75		100	3
5	Open Elective Courses	—	Open Elective-I	3	0	0	3	3	25	75		100	3
6	Open Elective Courses	—	Open Elective -II	3	0	0	3	3	25	75		100	3
7	Professional Core Courses	PCC-FT- 306 G	Computer Applications and CAD Lab	0	0	2	2	1	25		25	50	3
8	Training	PR-FT- 308 G	Fire Ground Operation-IV (Rescue Operations)	0	0	2	2	1	25		25	50	3
TOTAL								21				700	

NOTE:

- At the end of 6th semester each student has to undergo Practical Training based on Fire and Safety/ Fire and Safety equipments installation, care and maintenance/Fire and Safety Audits/Any Certificate Course related to Fire and Safety (Min Contact Hours must be 30 Hrs) of 4/6 weeks in an Industry/ Institute/ Professional Organization/ Research Laboratory/ Training Centre/ other building Occupancy etc. and submit typed report along with a certificate from the organization & its evaluation shall be carried out in the 7th Semester.
- Choose any one from Elective-III
- Choose any one from Elective-IV
- Choose any one from Open Elective-I
- Choose any one from Open Elective-II

Registrar
Ganga Institute of Tech. & Mgt
Kablana, Jhajjar

Professional Elective Courses (Third Year)

Sr. No.	Course Code	Course Title	Total Contact Hrs	Credit
1	PEC-FTEL321	Fire Safety Codes and Standards	3	3
2	PEC-FTEL322	Nuclear Safety and Radioactive Materials	3	3
3	PEC-FTEL323	Fire Risk Calculations	3	3
4	PEC-FTEL324	Salvage Evaluation of Fire Situation	3	3
5	PEC-FTEL325	Special Hazards and Protection	3	3
6	PEC-FTEL326	Building Design and Drawing	3	3
7	PEC-FTEL327	Fire Modeling	3	3
8	PEC-FTEL328	Electrical Systems and Safety in Design	3	3
9	PEC-FTEL329	Safety in Petroleum and Petrochemical Industries	3	3
10	PEC-FTEL330	Design of Pipe, Pressure Vessels and Machine Elements	3	3

Open Elective Courses (Third Year)

Sr. No.	Course Code	Course Title	Total Contact Hrs	Credit
1	OEC-FTEL-331	Materials and Metrology	3	3
2	OEC-FTEL-332	Power Plant Engineering	3	3
3	OEC-FTEL-333	Computer Applications, and CAD-CAM	3	3
4	OEC-FTEL-334	Process Instrumentation and Control Engineering	3	3
5	OEC-FTEL-335	Operation Research	3	3
6	OEC-FTEL-336	Industrial Noise and Vibrations	3	3
7	OEC-FTEL-337	Engineering Economics	3	3
8	OEC-FTEL-338	Artificial Intelligence	3	3
9	OEC-FTEL-339	Environmental Engineering and Management	3	3
10	OEC-FTEL-340	Robotics and Robot Applications	3	3

Note: A Student can not choose the same subject as Professional Elective Courses and Open Elective Courses in Sem V and Sem VI


 Registrar
 Ganga Institute of Tech. & Mgt
 Kablana, Jhajjar

Scheme of Studies and Examination
B.Tech (Fire Technology and Safety) – 7th Semester
w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	External Examination	Practical	Total	
1	Professional Core Courses	PCC-FT-401G	Fire Laws	3	0	0	3	3	25	75		100	3
2	Humanities and Social Sciences including Management Courses	HSMC-FT-403G	Disaster Mitigation and Management	3	0	0	3	3	25	75		100	3
3	Professional Core Courses	PCC-FT-405G	Safety and Risk Management	2	1	0	3	3	25	75		100	3
4	Professional Elective Courses	-	Professional Elective-V	3	0	0	3	3	25	75		100	3
5	Open Elective Courses	-	Open Elective-III	3	0	0	3	3	25	75		100	3
6	Professional Core Courses	PCC-FT-407G	Chemical Engineering Lab	0	0	2	2	1	25		25	50	3
7	Professional Core Courses	PCC-FT-409G	MATLAB Programming Lab	0	0	2	2	1	25		25	50	3
8	Project	PROJ-FT-411G	Project-I	0	0	6	6	3	25		25	50	3
9	Seminar	PCC-FT-413G	Industrial Seminar-II	0	0	2	2	0	25		25	50	3
10	Practical Training	PT-FT-415G	Fire Ground Operation-V	0	0	2	2	1	25		25	50	3
11	Mandatory Courses	MC-417G	Constitution of India	2	0	0	0	0	0				
TOTAL CREDIT								21				750	

Note: 1 The students will be awarded grades A, B, C & F in Evaluation of Constitution of India. A student who is awarded 'F' grade is required to repeat.

Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.

Note:

1. Choose any one from Professional Elective-V
2. Choose any one from Open Elective-III


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Professional Elective – V

Sr. No.	Code	Subject
1	PEC-FT-419G	Industrial, Rural and Forest Development
2	PEC-FT-421G	Fire and Smoke Dynamics
3	PEC-FT-423G	Fires in Common Commercial Goods -I
4	PEC-FT-425G	Fire Service Communication and Mobilizing
5	PEC-FT-427G	Safety Provisions and Precautions in Industry

Open Elective – II

Sr. No.	Code	Subject
1	OEC-FT-429G	Environment Protection and Waste Management
2	OEC-FT-431G	Safety Engineering and its Industrial Applications
3	OEC-FT-433G	Transportation Engineering and Safety
4	OEC-FT-435G	Tribology and Maintenance
5	OEC-FT-437G	Total Quality Management


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.Tech (Fire Technology and Safety) – 8th Semester
w.e.f. 2021-22

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination Schedule (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	External Examination	Practical	Total	
1	Professional Core Courses	PCC-FT-402G	Design & Installation of Detection and Fire Fighting Systems	3	0	0	3	3	25	75		100	3
2	Humanities and Social Sciences including Management Courses	HSMC-FT-404G	Applied Psychology and Ethical Science	2	0	0	2	2	25	75		100	3
3	Humanities and Social Sciences including Management Courses	HSMC-FT-406G	Industrial Hygiene and Occupational Health Safety	3	0	0	3	3	25	75		100	3
4	Professional Elective Courses	-	Professional Elective-VI	3	0	0	3	3	25	75		100	3
5	Open Elective Courses	-	Open Elective-IV	3	0	0	3	3	25	75		100	3
6	Professional Core Courses	PCC-FT-408G	Design & Installation of Detection and Fire Fighting Systems Lab	0	0	2	2	1	25		25	50	3
7	Professional Core Courses	PCC-FT-410G	Industrial Hygiene Lab	0	0	2	2	1	25		25	50	3
8	Project	PROJ-FT-412G	Project-II	0	0	6	6	3	25		25	50	3
9	Seminar	PCC-FT-414G	Seminar	0	0	0	2	1	50			50	3
10	Practical Training	PT-FT-416G	Fire Ground Operation-VI	0	0	2	2	1	25		25	50	3
TOTAL CREDIT								21				750	

Note:

1. Choose any one from Professional Elective-VI
2. Choose any one from Open Elective-IV

Gms
 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Professional Elective – VI

Sr. No.	Code	Subject
1	PEC-FT-418G	Fire Service Operations
2	PEC-FT-420G	Fire and Arson Investigation
3	PEC-FT-422G	Structure's Behavior under Fire
4	PEC-FT-424G	Practical Firemanship
5	PEC-FT-426G	Fires in Common Commercial Goods -II

Open Elective – IV

Sr. No.	Code	Subject
1	OEC-FT-428G	Entrepreneurship
2	OEC-FT-430G	Safety in Mines
3	OEC-FT-432G	Environment and Sustainable Development
4	OEC-FT-434G	Cyber Laws and Ethics
5	OEC-FT-436G	Industrial Engineering and Safety Management


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
ELECTRICAL ENGINEERING
B. Tech, 2nd year (IIIrd semester) w.e.f 2019-20

S. No.	Course Code	Course Title	Teaching Schedule			Marks of Class Work	Examination Marks		Total Marks	Credits	Duration of Examination (in hours)
			L	T	P		Theory	Practical			
1.	PCC-EE-201G	Electric Circuit Analysis	3	1	0	25	75	0	100	4	3
2.	PCC-EE-203G	Electric Circuit Analysis Laboratory	0	0	2	25	0	25	50	1	-
3.	PCC-EE-205G	Analog Electronics	3	0	0	25	75	0	100	3	3
4.	PCC-EE-207G	Analog Electronics Laboratory	0	0	2	25	0	25	50	1	-
5.	PCC-EE-209G	Electrical Machines-I	3	1	0	25	75	0	100	4	3
6.	PCC-EE-211G	Electrical Machines-I Laboratory	0	0	2	25	0	25	50	1	-
7.	PCC-EE-210G	Measurement and Instrumentation	3	0	0	25	75	0	100	3	3
8.	PCC-EE-212G	Measurement and Instrumentation Laboratory	0	0	2	25	0	25	50	1	-
9.	ESC-202-G	Engineering Mechanics	3	1	0	25	75	0	100	4	3
10.	MC-GES-106-G	Environmental Studies	3	0	1	25	75	0	100	0	3
Total									800	22	

L-Lecture, T-Tutorial, P-Practical

Note: The use of programmable devices such as programmable calculators etc. is not allowed during the exam. Sharing of materials will not be permitted during examination.

Amr
 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Bahajjar

Environmental Studies

Objective: To provide the basic knowledge in Environmental Sciences to students of Engineering. It will guide the students living in a historic transitional period of burgeoning awareness of the conflict between human activities and environmental constraints to help and save the fragile and endangered planet with the natural resources already overexploited.

Course code: MC-GES-106-G

Environmental Studies (Semester 1)							
Lecture	Tutorial	Practical/Field visit	Credit	Theory	Field visit	Total	Time
3	0	1	-	75	25	100	3Hrs


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK
ELECTRICAL ENGINEERING
B. Tech, 2nd year (IVth semester) w.e.f 2019-20

S. No.	Course Code	Course Title	Teaching Schedule			Marks of Class Work	Examination Marks		Total Marks	Credits	Duration of Examination (in hours)
			L	T	P		Theory	Practical			
1.	PCC-EE-202G	Digital Electronics	3	0	0	25	75	0	100	3	3
2.	PCC-EE-204G	Digital Electronics Laboratory	0	0	2	25	0	25	50	1	-
3.	PCC-EE-206G	Electrical Machines-II	3	1	0	25	75	0	100	4	3
4.	PCC-EE-208G	Electrical Machines-II Laboratory	0	0	2	25	0	25	50	1	-
5.	PCC-EE-210G	Transmission and Distribution	3	0	0	25	75	0	100	3	3
6.	PCC-EE-212G	Transmission and Distribution Laboratory	0	0	2	25	0	25	50	1	-
7.	PCC-EE-214G	Signals and Systems	3	0	0	25	75	0	100	3	3
8.	PCC-EE-216G	Electromagnetic Fields	3	1	0	25	75	0	100	4	3
9.	BSC-MATH-204G	Mathematics-III (Probability and Statistics)	3	1	0	25	75	0	100	4	3
10.		Indian Constitution	3	0	0	25	75	0	100	0	3
11.	BSC-BIO-201G	Biology-I	2	1	0	25	75	0	100	3	3
	TOTAL								850	27	

L-Lecture, T-Tutorial, P-Practical

Mandatory Course	Course Code	Course Title

Wms
 Registrar
 Ganga Institute of Tech. & Mgt.
 Jablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Electrical Engineering) – 5th Semester
w.e.f. 2020-21

Sl. No.	Course Code	Course Title	Teaching Schedule			Marks of class work	Examination marks		Total Marks	Credit	Duration of examination in hour
			L	T	P		Theory	Practical			
1.	PCC-EE-301G	Power Systems-I	3	0	0	25	75	0	100	3	3
2.	LC-EE-303G	Power Systems-I Laboratory	0	0	2	25	0	25	50	1	2
3.	PCC-EE305G	Control System	3	0	0	25	75	0	100	3	3
4.	LC-EE-307G	Control System LAB	0	0	2	25	0	25	50	1	2
5.	PCC-EE-309G	Microprocessor & Microcontroller	3	0	0	25	75	0	100	3	3
6.	LC-EE-311G	Microprocessor & Microcontroller Lab	0	0	2	25	0	25	50	1	2
7.	PCC-EE-313G	Computer Aided Electrical Machine Design	3	1	0	25	75	0	100	3	3
8.	LC-EE-315G	Computer Aided Electrical Machine Design Lab	0	0	2	25	0	25	50	1	2
9.	PEC-I	Professional Elective Courses (PEC): Refer List-I	3	0	0	25	75	0	100	3	3
10.	OEC-I	Open Elective Courses: Refer List-II	3	0	0	25	75	0	100	3	3
11.	HSMC-01G	Economics for Engineers	3	0	0	25	75	0	100	3	3
12.	PT-EE317G	Practical Training-1	-	-	-	-	-	-	* Refer Note 1		
Total									900	25	

Note:

- The evaluation of Practical Training-I will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat Practical Training.
 - Choose any one from Professional Elective
 - Choose any one from Open Elective
- Excellent: A; Good : B; Satisfactory: C; Not Satisfactory: F.**

List-I

Sr. No	Code	Subject	Credit
1	PEC-EE-01G	Wind and Solar Energy System	3
2	PEC-EE-03G	Electrical Drives	3
3	PEC-EE-05G	HVDC Transmission System	3
4	PEC-EE-07G	High Voltage Engineering	3

List-II

Sr.No	Code	Subject	Credit
1	OEC-EE01G	Electrical Engineering Materials	3
2	OEC-EE03G	Nano Electronics	3
3	OEC-EE05G	Intelligent Instrumentation	3
4	OEC-EE07G	Power Plant Engineering	3


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Scheme of Studies and Examination
B.TECH (Electrical Engineering) – 6th Semester
w.e.f. 2020-21

Sl. No.	Course Code	Course Title	Teaching Schedule			Marks of class work	Examination marks		Total Marks	Credit	Duration of examination in hour
			L	T	P		Theory	Practical			
1.	PCC - EE-302G	Power Systems– II	3	0	0	25	75	0	100	3	3
2.	LC -EE-304G	Power Systems– II Laboratory	0	0	2	25	0	25	50	1	2
3.	PCC - EE-306G	Power Electronics	3	0	0	25	75	0	100	3	3
4.	LC -EE-308G	Power Electronics Laboratory	0	0	2	25	0	25	50	1	2
5.	LC -EE-310G	Electronics Design Laboratory	1	0	4	25	50	25	100	3	3
6.	PEC-II	Professional Elective Courses (PEC): Refer List-III	3			25	75	0	100	3	3
7.	PEC-III	Professional Elective Courses (PEC): Refer List-IV	3			25	75	0	100	3	3
8.	OEC-II	Open Elective Courses: Refer List –V	3			25	75	0	100	3	3
9.	HSMC - 02G	Organisational Behaviour	3			25	75	0	100	3	3
Total									800	23	

Note:

1. Each student has to undergo practical training of 6 weeks during summer vacation after 6th semester and its evaluation shall be carried out in 7th Semester.
2. Choose any one from Professional Elective
3. Choose any one from Open Elective


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

List-III

PROGRAMME ELECTIVE (Semester-VI)			
Sr. No	Code	Subject	Credit
1.	PEC-EE-04G	Digital Signal Processing	3
2.	PEC-EE-06G	Power System Protection	3

List-IV

PROGRAMME ELECTIVE (Semester-VI)			
3.	PEC-EE-18G	Advance Electric Drives	3
4.	PEC-EE-08G	Power Quality and FACTS	3

List-V

OPEN ELECTIVE-I [Semester-VI]			
Sr.No	Code	Subject	Credit
1.	OEC-EE-04G	VHDL and DIGITAL DESIGN	3
2.	OEC-EE-06G	Distributed Energy Integration	3
3.	OEC-EE-08G	Conventional and Renewable Energy Resources	3
4.	OEC-EE-10G	Soft Computing	3


 Registrar
 Ganga Institute of Tech. & Mgt.
 Jablana, Jhajjar

UNIVERSITY INSTITUTE OF ENGINEERING AND TECHNOLOGY
MAHARSHI DAYANAND UNIVERSITY, ROHTAK

NEW SCHEME OF STUDIES AND EXAMINATION(w.e.f. 2021-22)

B-TECH 4th YEAR (ELECTRICAL ENGINEERING) SEMESTER-VII

Sl. No.	Course Code	Course Title	Teaching Schedule L T P			Examination Schedule (Marks)				Credit	Duration of Exam (Hours)
						Mark of Class work	Theory	Practical	Total		
1.	Refer to Table-1	Program Elective -IV	3	1	0	25	75	0	100	4	3
2.	Refer to Table-II	Program Elective -V	3	1	0	25	75	0	100	4	3
3.	Refer to Table-III	Open Elective-III	3	0	0	25	75	0	100	3	3
4.	Refer to Table-IV	Open Elective-IV	3	0	0	25	75	0	100	3	3
5.	PROJ-EE-423G	Project Stage-I	0	0	4	50	0	50	100	2	3
6.	HSMC - 08G	Fundamentals of Management	2	0	0	25	75	0	100	2	2
7.	INT -EE-425G	Evaluation of Summer Internship	0	0	2	-	-	-	-	-	-
Total									600	18	

Note: 1. The evaluation of Summer Internship will be based on seminar, viva-voce, report submitted by the students. According to performance, the students are awarded grades A, B, C, F. A student who is awarded 'F' grade is required to repeat.

TABLE-1
PROGRAM ELECTIVE LIST(Program Elective -IV)

S. No.	Course Code	Title of the Course
1.	PEC-EE-401G	Power management
2.	PEC-EE-403G	Electrical Engineering Drawing
3.	PEC-EE-405G	Utilization of Electrical Power
4.	PEC-EE-407G	Advanced Power Electronics
5.	PEC-EE-409G	Power System Planning and Reliability

Registrar 
Ganga Institute of Tech. & Mgt.
Kotiana, Jhajjar

TABLE-II
PROGRAM ELECTIVE LIST (Program Elective -V)

S. No.	Course Code	Title of the Course
1.	PEC-EE-411G	Modelling and Analysis of Electrical Machines
2.	PEC-EE-413G	Microcontroller Based System Design
3.	PEC-EE-415G	Advanced Power Transmission
4.	PEC-EE-417G	Computer Aided Power System Analysis

TABLE-III
OPEN ELECTIVE LIST FOR VII SEM(Open Elective-III)

S. No.	Course Code	Title of the Course
1	OEC-EE-401G	Intelligent Systems & Control
2	OEC-EE-403G	Renewable Energy and distributed generation
3	OEC-EE-405G	Reliability engineering
4	OEC-CE- 448G	Traffic Engineering and Road Safety
5	OEC-ME-410G	Quality Engineering

TABLE-IV
OPEN ELECTIVE LIST FOR VII SEM(Open Elective-IV)

S. No.	Course Code	Title of the Course
1	OEC-EE-407G	Solar Photovoltaic Technology
2	OEC-EE-409G	Energy Conservation and Management
3	OEC-CE- 450G	Disaster Management
4	OEC-ECE-451-G	Electronic Principles
5	OEC-MATH-405 G	Advance Engineering Mathematics
6	OEC-CSE-430G	Computer Communication


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

NEW SCHEME OF STUDIES AND EXAMINATION(w.e.f 2021-22)
B-TECH 4th YEAR (ELECTRICAL ENGINEERING) SEMESTER-VIII

Sl. No.	Course Code	Course Title	Teaching Schedule L T P			Examination Schedule (Marks)				Credit	Duration of Exam (Hours)
						Mark of Class work	Theory	Practical	Total		
1.	Refer to Table-V	Program Elective –VI	3	1	0	25	75	0	100	4	3
2.	Refer to Table-VI	Open Elective-V	3	0	0	25	75	0	100	3	3
3.	Refer to Table-VII	Open Elective-VI	3	0	0	25	75	0	100	3	3
4.	PROJ-EE-422G	Project Stage-II	0	0	8	50	0	100	150	4	3
5.	SEM-EE-424G	Seminar	0	0	2	50	0	50	100	1	3
6.	GP –EE-426G	General Proficiency	0	0	2			50	50	-	3
Total									600	15	

TABLE-V
PROGRAM ELECTIVE LIST FOR VIII SEM(Program Elective –VI)

S. No.	Course Code	Title of the Course
1.	PEC-EE-402G	Special Electrical Machines
2.	PEC-EE-404G	Applications of Power Electronics in Power Systems
3.	PEC-EE-406G	Power System Stability
4.	PEC-EE-408G	Advanced Control Systems
5.	PEC-EE-410G	Advances in Power Transmission & Distribution

TABLE-VI
OPEN ELECTIVE LIST FOR VIII SEM (Open Elective-V)

S. No.	Course Code	Title of the Course
1	OEC-EE-402G	Solar Thermal Applications
2	OEC-EE-404G	Electrical Safety and Standards
3	OEC-EE-406G	Industrial control
4	OEC-CE-452-G	Elements of Civil Engineering
5	OEC –ME-402G	Operations Research
6		


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

TABLE-VII
OPEN ELECTIVE LIST FOR VIII SEM(Open Elective-VI)

S. No.	Course Code	Title of the Course
1	OEC-EE-408G	Solar Energy Appliances
2	OEC-EE-410G	Renewable Energy Converters
3	OEC-EE-412G	Robotics
4	OEC-EE-414G	Energy Management and Auditing
5	OEC-ECE-452-G	Intelligent Instrumentation for Engineers



Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

Department of Computer Science & Applications

NORMS FOR ADMISSION TO REGULAR MCA 2-YEAR PROGRAMME AS PER THE LATEST GUIDELINES OF AICTE 2020-21 With effect from the Session 2020-21

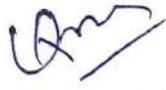
Eligibility for Admission to MCA 2-year Programme:

a) Passed BCA/B.Sc.(Hons.) Computer Science/ B.E. or B.Tech.(CSE/IT)/ B.Voc.(Software Development/IT) or an equivalent degree with having at least 50% marks (45% for SC/ST candidates of Haryana only) in aggregate.

Or

b) Passed B.Sc/ B.Com/ B.A with Mathematics at 10+2 level or at Graduation level with having at least 50% marks(45% for SC/ST candidates of Haryana only) in aggregate, along with the students admitted with this eligibility will have to simultaneously undertake additional **Bridge Course* as prescribed by the University during the first semester.

*Note: * It is compulsory for each student to pass out Bridge Course (three additional theory papers and one practical as prescribed in scheme of examination of Bridge Course) as per University norms during the 1st year of MCA-2 year course and the degree will be awarded after the completion of Bridge Course. However, these papers under Bridge Course will be taught only in the 1st semester of the course.*


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

SCHEME OF EXAMINATIONS AND SYLLABUS
REGULAR MASTER OF COMPUTER APPLICATIONS 2- YEAR PROGRAMME
With effect from the Session 2020-21

Scheme of Examinations and Syllabus
for
Bridge Course to Regular MCA 2- year programme
With effect from the Session 2020-21

Programme Specific Outcomes:

The students upon completion of bridge course will be able to:

PSO1: To scale up the knowledge and understanding to be able to continue MCA 2-year programme.

PSO2: Apply knowledge of computing fundamentals for understanding problems that may be solved using computers.

PSO3: Analyze scenarios that require integrated solutions using one or more Programming Languages.

PSO4: Create basic computing skills to undertake more specialized courses offering emerging technologies with ease.

PSO5: Advance their career in the domain of computer science by acquiring higher order skills.

Course Code	Course Name	External Marks	Internal Marks	Total	Credits
20BCC11C1	Computer Fundamentals and Programming in C	80	20	100	4:0:0
20BCC11C2	C++ and Data Structures	80	20	100	4:0:0
20BCC11C3	Visual Basic & Database Systems	80	20	100	4:0:0
20BCC11CL1	Lab based on 20BCC11C1, 20BCC11C2 & 20BCC11C3	80	20	100	0:0:4
Total credits					16

Note: It is compulsory for each student to pass out Bridge Course (three additional theory papers and one practical as prescribed in scheme of examination of Bridge Course) as per University norms during the 1st year of MCA-2 year course and the degree will be awarded after the completion of Bridge Course. However, these papers under Bridge Course will be taught only in the 1st semester of the course.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

**Scheme of Examinations and Syllabus
for
MCA 2- year programme
With effect from the Session 2020-21**

Programme Specific Outcomes:

The students upon completion of Regular MCA 2-year Programme will be able:

- PSO1 To apply knowledge of computing fundamentals, computing specialization and domain knowledge for the abstraction and conceptualization of computing models from defined problems and requirements.
- PSO2 To have the ability to understand and analyze a given real-world problem and propose feasible computing solutions. Also analyze customer requirements, create high level design, implement and document robust and reliable software systems.
- PSO3 To transform complex business scenarios and contemporary issues into problems, investigate, understand and propose integrated solutions using emerging technologies.
- PSO4 To use the latest technologies like IoT, AI, Machine Learning, Big Data Analytics, Cyber Security and modern hardware and software tools necessary for innovative software solutions and to possess leadership and managerial skills with best professional ethical practices and social concern
- PSO5 To master fundamental project management skills, concepts and techniques, set attainable objectives and ensure positive results, meeting scope, time and budget constraints
- PSO6 To recognize the need for self-motivation to engage in lifelong learning, the social, professional, cultural and ethical issues involved in the use of computer technology and give them due consideration in developing software systems
- PSO7 To assess the need for innovation and initiate the process through entrepreneurship or otherwise and to work collaboratively as a member or leader in multidisciplinary teams
- PSO8 To select their career after acquiring necessary eligibility requirement and the skill-set.

MCA First Year

Semester-I

Paper Code	Course	External Marks	Internal Marks	Total Marks	Credits
20MCA21C1	Object Oriented Programming Using JAVA	80	20	100	4:0:0
20MCA21C2	Compiler Design	80	20	100	4:0:0
20MCA21C3	Computer Graphics & Multimedia	80	20	100	4:0:0
20MCA21C4	Digital Design & Computer Architecture	80	20	100	4:0:0
20MCA21C5	Advance Data Structures Using C++/Java	80	20	100	4:0:0
20MCA21CL1	Software Lab -1 Based on 20MCA21C1, 20MCA21C2 & 20MCA21C3	100*	----	100	0:0:3
20MCA21CL2	Software Lab -2 Based on 20MCA21C4 & 20MCA21C5	100*	----	100	0:0:3
Total					Credits 26

Registrar
Ganga Institute of Tech. & Mgt.
Kabliana, Jhajjar

Semester-II

Paper Code	Course	External Marks	Internal Marks	Total Marks	Credits
20MCA22C1	Advance Object Technology	80	20	100	4:0:0
20MCA22C2	Advance Database Systems & Data Warehouse	80	20	100	4:0:0
20MCA22C3	Operating Systems & Shell Programming	80	20	100	4:0:0
	Elective-I				
20MCA22DA1/	i) Theory of Computation	80	20	100	4:0:0
20MCA22DA2/	ii) Computer Networks & Distributed Systems	80	20	100	4:0:0
20MCA22DA3/	iii) Web Technologies	80	20	100	4:0:0
	Elective-II				
20MCA22DB1/	i) Cloud Computing	80	20	100	4:0:0
20MCA22DB2/	ii) Software Engineering	80	20	100	4:0:0
20MCA22DB3/	iii) Advance Computer Architecture & Quantum Computing	80	20	100	4:0:0
20MCA22CL1	Software Lab-3 Based on 20MCA22C1 & Elective I and/or II	100*	----	100	0:0:3
20MCA22CL2	Software Lab-4 Based on 20MCA22C2 & 20MCA22C3	100*	----	100	0:0:3
20MCA22C4	Industry Internship Report/ Project Report/Dissertation –I	100**	----	100	0:3:0
Total					Credits 29
	Foundation Electives (O)				
	To be Chosen from the pool of Foundation Electives provided by the university.				2

Total Credits= 31 Credits

*20 marks out of 100 will be based on the attendance, evaluation/assessment of the candidate in Test(s) and Assignment(s) during the semester, which will be forwarded by the Head of Dept./Director to the Examiner(s). Further, both practical exams of a semester may be conducted on the same day in 2 sittings each maximum of 3 hours.

**20 marks out of 100 will be based on evaluation/assessment of the candidate by the internal supervisor.

Registrar
Ganga Institute of Tech. & PG
Kablana, Jhajjar

With effect from the Session 2021-22
MCA Second Year

Semester-III

Paper Code	Course	External Marks	Internal Marks	Total Marks	Credits
21MCA23C1	Data Mining & Big Data Analytics	80	20	100	4:0:0
21MCA23C2	Artificial Intelligence & Computational Intelligence	80	20	100	4:0:0
21MCA23C3	Android Mobile Application Development	80	20	100	4:0:0
	Elective-I				
21MCA23DA1/	i) Computer Vision	80	20	100	4:0:0
21MCA23DA2/	ii) Software Testing & Quality Assurance	80	20	100	4:0:0
21MCA23DA3/	iii) Mixed Reality & Wearable Computing	80	20	100	4:0:0
	Elective-II				
21MCA23DB1/	i) Network Programming	80	20	100	4:0:0
21MCA23DB2/	ii) Natural Language Processing & Speech Recognition	80	20	100	4:0:0
21MCA23DB3/	iii) Bioinformatics Computing	80	20	100	4:0:0
21MCA23CL1	Software Lab-5 Based on 21MCA23C1&21MCA23C3	100*	----	100	0:0:3
21MCA23CL2	Software Lab-6 Based on 21MCA23C2, Elective I & II	100*	----	100	0:0:3
Total					Credits 26
	Open Elective (O)				
	To be Chosen from the pool of Open Electives provided by the University (excluding the open elective prepared by the Department of Comp Sc. & Appls.)				3

Total Credits= 29 Credits

*20 marks out of 100 will be based on the attendance, evaluation/assessment of the candidate in Test(s) and Assignment(s) during the semester, which will be forwarded by the Head of Dept./Director to the Examiner(s). Further, both practical exams of a semester may be conducted on the same day in 2 sittings each maximum of 3 hours.

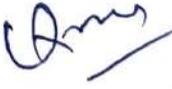

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Semester-IV

Paper Code	Course	External Marks	Internal Marks	Total Marks	Credits
21MCA24C1	Advance Software Engineering	80	20	100	4:0:0
21MCA24C2	IoT & Sensor Networks	80	20	100	4:0:0
21MCA24C3	Web Development Using .NET Framework	80	20	100	4:0:0
	Elective-I				
21MCA24DA1/	i) Cyber Security & Blockchain Technology	80	20	100	4:0:0
21MCA24DA2/	ii) Edge and Fog Computing	80	20	100	4:0:0
21MCA24DA3/	iii) High Speed Networks	80	20	100	4:0:0
	Elective-II				
21MCA24DB1/	i) Machine Learning & Python Programming	80	20	100	4:0:0
21MCA24DB2/	ii) Web Development Using PHP	80	20	100	4:0:0
21MCA24DB3/	iii) Neural Networks & Deep Learning	80	20	100	4:0:0
21MCA24CL1	Software Lab-7 Based on 21MCA24C1, 21MCA24C2 & Elective II	100*	----	100	0:0:3
21MCA24CL2	Software Lab-8 Based on 21MCA24C3 & Elective I	100*	----	100	0:0:3
21MCA24C4	Industry Internship Report/ Project Report/ Dissertation –II	100**	----	100	0:3:0
Total					Credits 29
Grand Total of 2 Years' Credits					Credits 115

*20 marks out of 100 will be based on the attendance, evaluation/assessment of the candidate in Test(s) and Assignment(s) during the semester, which will be forwarded by the Head of Dept./Director to the Examiner(s). Further, both practical exams of a semester may be conducted on the same day in 2 sittings each maximum of 3 hours.

**20 marks out of 100 will be based on evaluation/assessment of the candidate by the Internal Supervisor.


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

SCHEME OF EXAMINATIONS

FOR
TWO YEAR MBA PROGRAMME FROM THE SESSION 2019-20

FIRST YEAR: FIRST SEMESTER

Course Code	Title of the Course (s)	External Marks	Sessional Marks	Practical Marks	Total Marks	Credits (L-T-P)
CORE COURSES						
19IMG21C1	Management Concepts and Organizational Behavior	80	20	-	100	3-1-0
19IMG21C2	Managerial Economics	80	20	-	100	3-1-0
19IMG21C3	Accounting for Managers	80	20	-	100	3-1-0
19IMG21C4	Business Statistics and Analytics	80	20	-	100	3-1-0
19IMG21C5	Operations Management	80	20	-	100	3-1-0
19IMG21C6	Computer Fundamentals and Office Automation Tools	50	-	50	100	3-0-1
19IMG21C7	Business Environment	80	20	-	100	3-1-0
Discipline Specific Elective Courses (Each student will opt one course)						
19IMG21D1	Business Communication Skills	80	20	-	100	3-1-0
19IMG21D2	Event Management	80	20	-	100	3-1-0
Total Credits in 1st Semester						32

FIRST YEAR: SECOND SEMESTER

Course Code	Title of the Course (s)	External Marks	Sessional Marks	Practical Marks	Total Marks	Credits (L-T-P)
CORE COURSES						
19IMG22C1	Financial Management	80	20	-	100	3-1-0
19IMG22C2	Marketing Management	80	20	-	100	3-1-0
19IMG22C3	Human Resource Management	80	20	-	100	3-1-0
19IMG22C4	Business Research Methods	80	20	-	100	3-1-0
19IMG22C5	IT Infrastructure Management	50	-	50	100	3-0-1
19IMG22C6	Comprehensive Viva-voce	100	-	-	100	4

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Foundation Elective Course						
Each student will opt one course from the pool of Foundation Elective Courses provided by the University, excluding the Foundation Elective Course prepared by the Institute of Management Studies and Research.						2
Open Elective Course						
Each student will opt one course from the pool of Open Elective Courses provided by the University, excluding the Open Elective Courses prepared by the Institute of Management Studies and Research.						3
Discipline Specific Elective Courses (Each student will opt one course)						
19IMG22D1	Entrepreneurship	80	20	-	100	3-1-0
19IMG22D2	Creativity and Innovation Management	80	20	-	100	3-1-0
Total Credits in 2nd Semester						33

NOTE: Immediately after the completion of the Second semester, the students shall proceed for their Summer Vacation Training (SVT) of eight weeks duration. The Summer Training Report prepared after the completion of SVT shall be assessed in the third Semester as a compulsory course. The SVT will be submitted by the candidates in the manner as specified in the Ordinance.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

SECOND YEAR: THIRD SEMESTER

Course Code	Title of the Course (s)	External Marks	Sessional Marks	Practical Marks	Total Marks	Credits (L-T-P)
CORE COURSES						
20IMG23C1	Strategic Management	80	20	-	100	3-1-0
20IMG23C2	Corporate Laws	80	20	-	100	3-1-0
20IMG23C3	Operations Research	80	20	-	100	3-1-0
20IMG23C4	Summer Training Report	100	-	-	100	4
Open Elective Course						
Each student will opt one course from the pool of Open Elective Courses provided by the University, excluding the Open Elective Courses prepared by the Institute of Management Studies and Research.						3
Discipline Specific Elective Courses (specialization areas offered under dual specialization scheme) Students will opt two papers in each of the two SAME specialization areas in III as well as IV semester.						
HUMAN RESOURCE MANAGEMENT						
20IMG23GH1	Compensation and Benefits Management	80	20	-	100	3-1-0
20IMG23GH2	Organizational Change and Intervention Strategies	80	20	-	100	3-1-0
20IMG23GH3	Human Resource Metrics and Analytics	80	20	-	100	3-1-0
20IMG23GH4	Management of Industrial Relations	80	20	-	100	3-1-0
20IMG23GH5	Strategic Human Resource Management	80	20	-	100	3-1-0
FINANCE MANAGEMENT						
20IMG23GF1	Indian Financial System and Financial Markets	80	20	-	100	3-1-0
20IMG23GF2	Project Management	80	20	-	100	3-1-0
20IMG23GF3	Business Taxation	80	20	-	100	3-1-0
20IMG23GF4	Investment Management	80	20	-	100	3-1-0
20IMG23GF5	Bank Management	80	20	-	100	3-1-0
INFORMATION TECHNOLOGY MANAGEMENT						
20IMG23GT1	E-Commerce and Applications	50	-	50	100	3-0-1
20IMG23GT2	Data Ware Housing and Data Mining	80	20	-	100	3-1-0
20IMG23GT3	E-Governance and Framework of ICT	80	20	-	100	3-1-0

20IMG23GT4	Multimedia and Web Development	50	-	50	100	3-0-1
20IMG23GT5	Enterprise Resource Planning	80	20	-	100	3-1-0
INTERNATIONAL BUSINESS MANAGEMENT						
20IMG23GI1	Foreign Exchange Management	80	20	-	100	3-1-0
20IMG23GI2	International Business Environment	80	20	-	100	3-1-0
20IMG23GI3	Export Import Management and Documentation	80	20	-	100	3-1-0
20IMG23GI4	Regional Economic Blocks	80	20	-	100	3-1-0
20IMG23GI5	International Logistics	80	20	-	100	3-1-0
MARKETING MANAGEMENT						
20IMG23GM1	Digital Marketing	50	-	50	100	3-0-1
20IMG23GM2	Customer Relationship Management	80	20	-	100	3-1-0
20IMG23GM3	Services Marketing	80	20	-	100	3-1-0
20IMG23GM4	Consumer Behavior	80	20	-	100	3-1-0
20IMG23GM5	Retail Management	80	20	-	100	3-1-0
OPERATIONS MANAGEMENT						
20IMG23GO1	Project Management	80	20	-	100	3-1-0
20IMG23GO2	Total Quality Management	80	20	-	100	3-1-0
20IMG23GO3	Supply Chain and Logistics Management	80	20	-	100	3-1-0
20IMG23GO4	Service Operations Management	80	20	-	100	3-1-0
20IMG23GO5	Research and Development Management	80	20	-	100	3-1-0
PUBLIC POLICY MANAGEMENT						
20IMG23GP1	Legal Institutional Dynamics	80	20	-	100	3-1-0
20IMG23GP2	Development Economics	80	20	-	100	3-1-0
20IMG23GP3	Right To Information Act	80	20	-	100	3-0-1
20IMG23GP4	Public Finance Administration	80	20	-	100	3-1-0

20IMG23GP5	Risk and Disaster Management	80	20	-	100	3-1-0
BUSINESS ANALYTICS						
20IMG23GB1	Business Analytics	80	20	-	100	3-1-0
20IMG23GB2	Fundamentals of Data Mining	80	20	-	100	3-1-0
20IMG23GB3	Fundamental of Econometrics	80	20	-	100	3-1-0
20IMG23GB4	Predictive Business Analytics	80	20	-	100	3-1-0
20IMG23GB5	Time Series Econometrics	80	20	-	100	3-1-0
AGRI-BUSINESS MANAGEMENT						
20IMG23GA1	Agri-business Environment and Policy	80	20	-	100	3-1-0
20IMG23GA2	Food Technology and Process Management	80	20	-	100	3-1-0
20IMG23GA3	Agri-business Management	80	20	-	100	3-1-0
20IMG23GA4	Agri-business Entrepreneurship	80	20	-	100	3-1-0
20IMG23GA5	Agri-Supply Chain Management	80	20	-	100	3-1-0
Total Credits in 3rd Semester						35


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

SECOND YEAR: FOURTH SEMESTER

Course Code	Title of the Course (s)	External Marks	Sessional / Internal Marks	Practical Marks	Total Marks	Credits (L-T-P)
Core Courses						
20IMG24C1	B2B Marketing	80	20	-	100	3-1-0
20IMG24C2	CSR and Business Ethics	80	20	-	100	3-1-0
20IMG24C3	Project Report	100	100	-	200	8
20IMG24C4	Comprehensive Viva-voce	100	-	-	100	4
Discipline Specific Elective Courses (specialization areas offered under dual specialization scheme)						
HUMAN RESOURCE MANAGEMENT						
20IMG24GH1	Business Negotiations and Employee Relations	80	20	-	100	3-1-0
20IMG24GH2	Training and Development	80	20	-	100	3-1-0
20IMG24GH3	Managing Interpersonal and Group Processes	80	20	-	100	3-1-0
20IMG24GH4	International Human Resource Management	80	20	-	100	3-1-0
20IMG24GH5	Performance Management Systems	80	20	-	100	3-1-0
FINANCE MANAGEMENT						
20IMG24GF1	Insurance and Risk Management	80	20	-	100	3-1-0
20IMG24GF2	Management of Financial Services	80	20	-	100	3-1-0
20IMG24GF3	Financial and Commodity Derivatives	80	20	-	100	3-1-0
20IMG24GF4	International Financial Management	80	20	-	100	3-1-0
20IMG24GF5	Financial Decision Analysis	80	20	-	100	3-1-0
INFORMATION TECHNOLOGY MANAGEMENT						
20IMG24GT1	Knowledge Management	80	20	-	100	3-1-0
20IMG24GT2	Information Security and Cyber Laws	80	20	-	100	3-1-0

20IMG24GT3	Systems Analysis and Design	80	20	-	100	3-1-0
20IMG24GT4	Programming in Visual Basic	50	-	50	100	3-0-1
20IMG24GT5	E-Business Information Systems Management	80	20	-	100	3-1-0
INTERNATIONAL BUSINESS MANAGEMENT						
20IMG24GI1	International Marketing Management	80	20	-	100	3-1-0
20IMG24GI2	Cross Cultural and Global Management	80	20	-	100	3-1-0
20IMG24GI3	International Business Laws	80	20	-	100	3-1-0
20IMG24GI4	Management of Multinational corporations	80	20	-	100	3-1-0
20IMG24GI5	International Trade Theory and Practices	80	20	-	100	3-1-0
MARKETING MANAGEMENT						
20IMG24GM1	Integrated Marketing Communications	80	20	-	100	3-1-0
20IMG24GM2	Marketing Research	80	20	-	100	3-1-0
20IMG24GM3	Product and Brand Management	80	20	-	100	3-1-0
20IMG24GM4	Sales and Distribution Management	80	20	-	100	3-1-0
20IMG24GM5	Industrial Marketing	80	20	-	100	3-1-0
OPERATIONS MANAGEMENT						
20IMG24GO1	Transportation Management	80	20	-	100	3-1-0
20IMG24GO2	Technology Management	80	20	-	100	3-1-0
20IMG24GO3	Warehouse Management and Inventory Control	80	20	-	100	3-1-0
20IMG24GO4	Sourcing Management	80	20	-	100	3-1-0

20IMG24GO5	Supply Chain Analytics	80	20	-	100	3-1-0
PUBLIC POLICY MANAGEMENT						
20IMG24GP1	Public Policy Evaluation	80	20	-	100	3-1-0
20IMG24GP2	Social Campaign Promotion	80	20	-	100	3-1-0
20IMG24GP3	Sustainable Development	80	20	-	100	3-1-0
20IMG24GP4	Rural Development	80	20	-	100	3-1-0
20IMG24GP5	Indian Social and Political System	80	20	-	100	3-1-0
BUSINESS ANALYTICS						
20IMG24GB1	Economics for Business Strategy	80	20	-	100	3-1-0
20IMG24GB2	Applied Multivariate Analysis	80	20	-	100	3-1-0
20IMG24GB3	Information Economics and its Applications	80	20	-	100	3-1-0
20IMG24GB4	Mathematical Statistics	80	20	-	100	3-1-0
20IMG24GB5	Market Microstructure	80	20	-	100	3-1-0
AGRI-BUSINESS MANAGEMENT						
20IMG24GA1	Agricultural Input Marketing and Post-Harvest Management	80	20	-	100	3-1-0
20IMG24GA2	Livestock Business Management	80	20	-	100	3-1-0
20IMG24GA3	Agribusiness Financial Management	80	20	-	100	3-1-0
20IMG24GA4	Agricultural Marketing Management	80	20	-	100	3-1-0
20IMG24GA5	International Agribusiness Trade	80	20	-	100	3-1-0
Total Credits in 4th Semester						36
Total Credits in MBA Programme						136


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

UNDER DUAL SPECIALIZATION SCHEME EACH STUDENT WILL OPT FOR ONE SPECIALIZATION AREA FROM GROUP A AND ONE FROM GROUP B.

Minimum of fifteen students are required for offering any specialization area in Group A and Group B by the Colleges/Institutions.

GROUP A	GROUP B
FINANCE MANAGEMENT	MARKETING
HUMAN RESOURCE MANAGEMENT	INFORMATION TECHNOLOGY MANAGEMENT
INTERNATIONAL BUSINESS MANAGEMENT	PUBLIC POLICY MANAGEMENT
BUSINESS ANALYTICS	AGRI-BUSINESS MANAGEMENT
OPERATIONS MANAGEMENT	—

PROGRAM SPECIFIC OUTCOMES

The program specific outcomes of Two Year (Four Semester) MBA (General) program are as follows:

- PSO1: Graduates are expected to collaborate and lead teams across organizational boundaries and demonstrate leadership qualities, maximize the usage of diverse skills of team members in the related context.
- PSO2: Comprehend and analyze the importance of functional and inter functional areas.
- PSO3: Recognize opportunities available and face the challenges in national and global business environment and adapt accordingly.
- PSO4: Employ appropriate models to select suitable projects for a business enterprise and manage firm growth through strategies such as mergers, acquisitions, international expansion, and new venture development.
- PSO5: Function as ethical, conscious and socially responsible managers, capable of contributing to the sustainable development of the nation.
- PSO6: Preparing the students to lead a successful career in industry or pursue higher studies or become an entrepreneur
- PSO7: Ability to offer commercially feasible and socially acceptable, managerial solutions to technical/non-technical problems.
- PSO8: Turning out graduates having the capability to demonstrate strong leadership skills, effective communication skills, professional etiquette and a desire to be a lifelong learner.

Note:

1. The duration of all the end term theory examinations shall be 3 hours.
2. The Criteria for awarding internal assessment of 20 marks shall be as under:
 - a) Class test : 10 marks.
 - b) Assignment and Presentation : 5 marks
 - c) Attendance : 5 marks
 - Less than 65% : 0 marks
 - Upto 70% : 2 marks
 - Upto 75% : 3 marks
 - Upto 80% : 4 marks
 - Above 80% : 5 marks

M.D. UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 1st YEAR (COMPUTER SCIENCE & ENGINEERING)
SEMESTER 1st
CBCS Scheme effective from 2016-17

Sr. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				Duration of Exam (Hours)	No of hours/ week	
			L	T	P	Total Credits	Marks of Class works	Theory	Practical	Total			
1	16CSE21C1	Data Communication and Computer Networks	4	0	-	4	50	100	-	150	3	4	
2	16CSE21C2	Advanced Operating Systems	4	0	-	4	50	100	-	150	3	4	
3	16CSE21C3	Advanced Database Management System	4	0	-	4	50	100	-	150	3	4	
4	16CSE21C4	Data Warehouse and Mining	4	0	-	4	50	100	-	150	3	4	
5	16CSE21C5	Mathematical Foundation of Computer Science	4	0	-	4	50	100	-	150	3	4	
6	16CSE21C6	Seminar	-	-	-	2	50	-	-	50		2	
7	16CSE21CL1	Advanced Operating Systems Lab	-	-	2	2	50	-	50	100	3	2	
8	16CSE21CL2	Advanced Database Management System Lab	-	-	2	2	50	-	50	100	3	2	
		TOTAL					26						

NOTE:

Examiner will set nine question in total. Question one will be compulsory and will comprises of all section and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.D. UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 1st YEAR (COMPUTER SCIENCE & ENGINEERING)
SEMESTER 2nd
CBCS Scheme effective from 2016-17

Sr. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				Duration of Exam (Hours)	No of hours /week
			L	T	P	Total Credits	Marks of Class works	Theory	Practical	Total		
1	16CSE22C1	Soft Computing	4	0	-	4	50	100	-	150	3	4
2	16CSE22C2	Algorithm Design	4	0	-	4	50	100	-	150	3	4
3	16CSE22C3	Seminar	-		2	2	50	-	-	50	-	2
4	16CSE22CL1	Soft Computing Lab	-	-	2	2	50	-	50	100	3	2
5	16CSE22CL2	Algorithm Design Lab	-	-	2	2	50	-	50	100	3	2
6	16CSE22D1 or 16CSE22D2 or 16CSE22D3 or 16CSE22D4	Elective-1	4	0	-	4	50	100	-	150	3	4
7		Open Elective				3						3
8		Foundation Elective				2						2
						23						

NOTE:Examiner will set nine question in total. Question One will be compulsory and will comprises of all section and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Elective 1 : Choose any one from the following papers

- 16CSE22D1 Mobile and Wireless Communication
- 16CSE22D2 Optimization Techniques
- 16CSE22D3 Discrete Mathematics
- 16CSE22D4 Internet and Web Development

Elective 2

A candidate has to select this paper from the pool of Open Electives provided by the University

Elective 3

A candidate has to select this paper from the pool of Foundation Electives provided by the University.

Amr
 Registrar
 Ganga Institute of Tech. & Mgt.
 Vidya, Jhajjar

M.D UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 2nd YEAR (COMPUTER SCIENCE & ENGINEERING)
SEMESTER 3rd
CBCS Scheme effective from 2017-18

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				Duration of Exam (Hours)	No of hours/ week
			L	T	P	Total credits	Marks of Class works	Theory	Practical	Total		
1	17CSE23C1	Knowledge Based System	4	0	-	4	50	100	-	150	3	4
2	17CSE23C2	Network Security	4	0	-	4	50	100	-	150	3	4
3	17CSE23C3	Literature Survey (Dissertation Stage 1)	-	-	2	2	100	-	-	100		4
4	17CSE23C4	Seminar	-		2	2	50	-	-	50		2
5	17CSE23CL1	Knowledge Based System Lab	-	-	2	2	50	-	50	100		2
6	17CSE23CL2	Project	-	-	2	2	50	-	50	100		2
7		Open Elective				3						
		TOTAL	21									

NOTE:

Examiner will set nine questions in total. Question One will be compulsory and will comprises of all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

OPEN ELECTIVE

A candidate has to select this paper from the pool of open electives provided by the University.

(Signature)
 Registrar
 Gangaj Institute of Tech. & Mgt.
 Kadiam, Jhajar

M.D UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 2nd YEAR (COMPUTER SCIENCE & ENGINEERING)
SEMESTER 4th
CBCS Scheme effective from 2017-18

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				No of Credits
			L	T	P	Total	Marks of Class works	Theory	Practical	Total	
1.	17CSE24C1	Dissertation and viva (Dissertation Stage 2)	-	-	-	-	250	-	500	750	20
		TOTAL	-	-	-	-					

NOTE:

1. Students have to publish a research paper in a journal / conference of the research work done in the semester.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY

(CYBER FORENSICS AND INFORMATION SECURITY)

SEMESTER-I

EFFECTIVE FROM 2013-14

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTCF 101	Mathematical Foundations of Information Security	4	-	-	50	100	150	3
MTCF 102	Networks and Information Security	4	-	-	50	100	150	3
MTCF 103	Operating Systems and Security	4	-	-	50	100	150	3
MTCF 104	Cyber Forensics	4	-	-	50	100	150	3
	Elective-I	4	-	-	50	100	150	3
MTCF 109	Information Security Lab	-	-	3	50	50	100	3
MTCF 110	OS Security Lab	-	-	3	50	50	100	3
TOTAL		20	-	6	350	600	950	

Elective- I

MTCF 105 – Advanced Computer Networks

MTCF 106 - Professional Ethics and Cyber Security

MTCF 107 – Security Threats

MTCF 108 - Information Theory and Coding


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY

(CYBER FORENSICS AND INFORMATION SECURITY)

SEMESTER-II

EFFECTIVE FROM 2013-14

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTCF 201	Ethical Hacking and Digital Forensics	4	-	-	50	100	150	3
MTCF 202	Database Security	4	-	-	50	100	150	3
MTCF 203	Steganography and Digital Watermarking	4	-	-	50	100	150	3
MTCF 204	Mobile & Wireless Security	4	-	-	50	100	150	3
	Elective-II	4	-	-	50	100	150	3
MTCF 209	Ethical Hacking Lab	-	-	3	50	50	100	3
MTCF 210	Steganography Lab	-	-	3	50	50	100	3
TOTAL		20	-	6	350	600	950	

Elective- II

MTCF 205- Security Threats & Vulnerabilities

MTCF 206 -Information Security, Management & Standards

MTCF 207- Multimedia Security

MTCF 208- Computer Security, Audit Assurance and Risk Management


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY

(CYBER FORENSICS AND INFORMATION SECURITY)

SEMESTER-III

EFFECTIVE FROM 2013-14

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTCF 301	Preserving & Recovering Digital Evidence	4	-	-	50	100	150	3
MTCF 302	Cyber Laws & Security Policy	4	-	-	50	100	150	3
	Elective-III	4	-	-	50	100	150	3
MTCF 307	Dissertation Phase 1	-	-	8	100	-	100	3
MTCF 308	Seminar & Technical Writing	-	-	2	50	-	50	-
TOTAL		12	-	10	300	300	600	

Elective- III

MTCF 303- Biometric Security

MTCF 304- Applied Cryptography

MTCF 305- Distributed Systems Security

MTCF 306- Secure Software Engineering


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY

(CYBER FORENSICS AND INFORMATION SECURITY)

SEMESTER-IV

EFFECTIVE FROM 2013-14

Course No.	Course Title	Teaching Schedule			Marks		Total
		L	T	P	Sessional	Exam.	
MTCF 401	Dissertation Phase-II	-	-	24	200	400	600
	Total		-	24	200	400	600

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.D.UNIVERSITY, ROHTAK
SCHEME OF STUDIES AND EXAMINATION
M.TECH 1st YEAR (MANUFACTURING & AUTOMATION)
SEMESTER 1
CBCS Scheme effective from 2016-17

Sl. No	Course Code	Subject	Credit Pattern				Examination Schedule (Marks)				Duration of Exam (Hours)	No of Hours /week
			L	T	P	Total Credits	Marks of Class work	Theory	Practical	Total		
1	16MMA21C1	Metal Forming Analysis	4	0	-	4	50	100	-	150	3	4
2	16MMA21C2	Mechatronics & Product Design	4	0	-	4	50	100	-	150	3	4
3	16MMA21C3	Total Quality Management	4	0	-	4	50	100	-	150	3	4
4	16MMA21C4	Welding & Allied Processes	4	0	-	4	50	100	-	150	3	4
5	16MMA21CL1	Mechatronics Lab	-	-	2	2	50		50	100	3	4
6	16MMA21CL2	Welding Lab	-	-	2	2	50		50	100	3	4
7	16MMA21CL3	CAD/CAM Lab	-	-	2	2	50		50	100	3	4
8	16MMA21C5	Seminar	-		-	2	50	-	-	50		2
9	16MMA21D1 or 16MMA21D2 or 16MMA21D3 OR 16MMA21D4	Elective I	4	-		4	50	100		150	3	4
TOTAL							28					

Elective I: Choose any one from the following three papers:

16MMA21D1 - INDUSTRIAL INSPECTION

16MMA21D2 - DESIGN AND METALLURGY OF WELDED

JOINTS 16MMA21D3 - FOUNDRY TECHNOLOGY

16MMA21D4-DESIGN PLANNING CONTROL AND PRODUCTION SYSTEM

NOTE:

Examiner will set nine questions in total. Question One will be compulsory and will comprise short answer type questions from all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.D.UNIVERSITY, ROHTAK
SCHEME OF STUDIES AND EXAMINATION
M.TECH 1st YEAR (MANUFACTURING & AUTOMATION)
SEMESTER 2
CBCS Scheme effective from 2016-17

Sl No	Course Code	Subject	Credit Pattern				Examination Schedule (Marks)				Duration of Exam (Hours)	No of Hours/ week
			L	T	P	Total Credits	Marks of Class works	Theory	Practical	Total		
1	16MMA22C1	Mechanical Design-I	4	0	-	4	50	100	-	150	3	4
2	16MMA22C2	Diagnostic Maintenance & Monitoring	4	0	-	4	50	100	-	150	3	4
3	16MMA22C3	Seminar	-	-	-	2	50	-	-	50		2
4	16MMA22CL1	CIM Lab	-	-	2	2	50	-	50	100	3	4
5	16MMA22CL2	Diagnostic Maintenance & Monitoring Lab	-	-	2	2	50	-	50	100	3	4
6	16MMA22D1 or 16MMA22D2 or 16MMA22D3	Elective-II	4	0	-	4	50	100	-	150	3	4
7		Open Elective	3	0	-	3						
8		Foundation Elective	2	0	-	2						

23

TOTAL

NOTE: Examiner will set nine questions in total. Question One will be compulsory and will comprise short answer type questions from all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Elective II : Choose any one from the following three papers:

16MMA22D1 - QUALITY CONTROL TECHNIQUES

16MMA22D2 - FINITE ELEMENT METHODS

16MMA22D3 - ARTIFICIAL INTELLEGENGE IN MANUFACTURING

Open Elective: A candidate has to select this paper from the pool of Open Electives provided by the University.

Foundation Elective: A candidate has to select this paper from the pool of Foundation Electives provided by the University.

Registrar 
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				Duration of Exam (Hours)	No of hours /week
			L	T	P	Total credits	Marks of Class works	Theory	Practical	Total		
1	17MMA23C1	Advanced metrology and calibration	4	0	-	4	50	100	-	150	3	4
2	17MMA23C2	Manufacturing Automation	4	0	-	4	50	100	-	150	3	4
3	17MMA23C3	Major Project (Dissertation Stage 1)	-	-	4	4	100	-	-	100		4
4	17MMA23CL1	Metrology & Automation Lab	-	-	2	2	50	-	50	100		2
5		Open Elective				3						
		TOTAL	19									

NOTE:

Examiner will set nine questions in total. Question One will be compulsory and will comprises of all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.D UNIVERSITY

SCHEME OF STUDIES AND EXAMINATION

M.TECH 2nd YEAR (MANUFACTURING & AUTOMATION)

SEMESTER 4th

CBCS Scheme effective from 2017-18

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)			No of Credits	
			L	T	P	Total	Marks of Class works	Theory	Practical		Total
1.	17MMA24C1	Major Project (Dissertation Stage 2)	-	-	-	-	250	-	500	750	20
		TOTAL	-	-	-	-	250	-	500	750	

NOTE:

- 1. Students have to publish a research paper in a journal / conference of the research work done in the semester.**

Registrar 
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

**M. TECH. MECHANICAL ENGINEERING (MACHINE DESIGN)
COURSE SCHEME and DETAILED SYLLABUS**

Semesterwise Course Scheme

FIRST SEMESTER

Subject Code	Subject	Credit	L-T-P	Marks Weightage		Grand total
				Theory	Sessional	
1. M801A	Numerical Analysis and Optimization	3	3-0-0	100	50	
2. M803A	Instrumentation and Measurement	3	3-0-0	100	50	
3. M805A	Experimental Stress Analysis	3	3-0-0	100	50	
4. M807A	Metal Forming Analysis	3	3-0-0	100	50	
5. M809A	Mechatronics and Product Design	3	3-0-0	100	50	
6. M811A	Experimental Stress Analysis Lab	1	0-0-2	25	25	
7. M813A	Mechanical Measurement Lab	1	0-0-2	25	25	
8. M815A	Computational Lab	1	0-0-2	25	25	
Total		18	15-0-6	575	325	900

SECOND SEMESTER

9. M802A	Theory of Elasticity	3	3-0-0	100	50	
10. M804A	Design of Mechanisms	3	3-0-0	100	50	
11. M806A	Principles of Machine Design	3	3-0-0	100	50	
12.	General Elective – I	3	3-0-0	100	50	
13.	General Elective – II	3	3-0-0	100	50	
14. M812A	Seminar	1	0-0-2	25	25	
15. M814A	CAD/CAM Lab	1	0-0-2	25	25	
16. M816A	Design Practice Lab – I	1	0-0-2	25	25	
Total		18	15-0-6	575	325	900

THIRD SEMESTER

17. M821A	Mechanical Behavior of Materials	3	3-0-0	100	50	
18. M823A	Mechanical Vibrations	3	3-0-0	100	50	
19. M825A	General Elective III	3	3-0-0	100	50	
20. M827A	Design Practice Lab II	1	0-0-2	25	25	
21. M829A	Materials Behavior and Vibration Lab	1	0-0-2	25	25	
22. M831A	Minor Project	5	0-0-10	150	100	
Total		16	9-0-14	500	300	800

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

SEMESTER IV

Subject Code	Subject	Credit	L-T-P	Marks		Weightage	
				Ext.	Int.		
23. M822A	Dissertation	12	0-0-24	400	200		
		Total	12	0-0-24	400	200	600

ELECTIVES I

1. M837 Design of Bearings and Shaft
2. M838 Computer Aided Design
3. M839 Design of Pollution Control Equipments
4. M840 Design of Pressure Vessels

ELECTIVES II

1. M845 Fracture Mechanics
2. M846 Design and Metallurgy of Welded Joints
3. M847 Finite Element Methods
4. M848 Materials Management

ELECTIVE III

1. M849 Total Quality Management
2. M850 Robotic Engineering
3. M851 Computer Aided Vehicle Design
4. M852 Tribology


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

**SCHEME OF STUDIES AND EXAMINATIONS FOR MASTER OF TECHNOLOGY IN
ELECTRICAL ENGINEERING
(Specialization: Electrical Power Systems)
SEMESTER-I**

S.No.	Course Code	Course Title	Teaching schedule			Class Work	Examination		Total
							Theory	Practical	
1	MTEPS101	Microprocessors & Microcontroller	3	1	0	50	100	-	150
2	MTEPS102	HVDC Transmission	3	1	0	50	100	-	150
3	MTEPS103	Power System Operation and Control	3	1	0	50	100	-	150
4	MTEPS104	Reactive Power Compensation & Management	3	1	0	50	100	-	150
5	MTEPS105	Elective – I	3	1	0	50	100	-	150
6	MTEPS106	Power Systems Laboratory	0	0	2	50	-	50	100
Grand Total			15	5	2	300	500	50	850

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A⁺, A,B,C,D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory and practical courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

**SCHEME OF STUDIES AND EXAMINATIONS FOR MASTER OF TECHNOLOGY IN
ELECTRICAL ENGINEERING**

**(Specialization: Electrical Power Systems)
SEMESTER-II**

S.No	Course Code	Course Title	Teaching schedule			Class Work	Examination		Total
							Theory	Practical	
1	MTEPS201	Power System Dynamics and Stability	3	1	0	50	100	-	150
2	MTEPS202	FACTS Controllers	3	1	0	50	100	-	150
3	MTEPS203	Real Time Control of Power Systems	3	1	0	50	100	-	150
4	MTEPS204	Advanced Power System Protection	3	1	0	50	100	-	150
5	MTEPS205	Elective – II	3	1	0	50	100	-	150
6	MTEPS206	Simulation Laboratory	0	0	2	50	-	50	100
Grand Total			15	5	2	300	500	50	850

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A⁺, A,B,C,D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory and practical courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATIONS FOR MASTER OF TECHNOLOGY IN
ELECTRICAL ENGINEERING
(Specialization: Electrical Power Systems)
SEMESTER-III

S.No	Course Code	Course Title	Teaching Schedule			Class Work	Examination		Total
			L	T	P		Theory	Practical	
1	MTEPS301	Elective – III	3	1	0	50	100	-	150
2	MTEPS302	Elective – IV	3	1	0	50	100	-	150
3	MTEPS303	Seminar			2	50	-	50	100
4	MTEPS304	Dissertation-Phase I	0	0	4	150	-	-	150
Grand Total			6	2	6	300	200	50	550

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A⁺, A,B,C,D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory, practical and Seminar courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

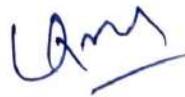
MAHARSHI DAYANAND UNIVERSITY, ROHTAK

SCHEME OF STUDIES AND EXAMINATIONS FOR MASTER OF TECHNOLOGY IN
ELECTRICAL ENGINEERING
(Specialization: Electrical Power Systems)
SEMESTER-IV

S.No.	Course Code	Course Title	Teaching Schedule			Class Work	Examination		Total
			L	T	P		Theory	E.VIVA	
1	MTEPS401	Dissertation Final Phase	0	0	20	200	-	400	600
Total					20	200	-	400	600

NOTE:

1. The sessionals of Dissertation shall be evaluated on the basis of grades i.e A⁺, A,B,C,D & E.
2. The Dissertation shall be evaluated by an examination committee consisting of the head of the department, Dissertation Supervisor and one External examiner. The evaluation should be based on above grades.
3. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).



Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

MAHARSHI DAYANAND UNIVERSITY, ROHTAK

**SCHEME OF STUDIES AND EXAMINATIONS FOR MASTER OF TECHNOLOGY IN
ELECTRICAL ENGINEERING
(Specialization: Electrical Power Systems)**

LIST OF ELECTIVES

S.No	Course Code	Course Title	Teaching Schedule			Class Work	Examination		Total
			L	T	P		Theory	Practical	
ELECTIVE-I									
1	MTEPS105(i)	Electrical distribution System	3	1	0	50	100	-	150
2	MTEPS105(ii)	EHVAC Transmission	3	1	0	50	100	-	150
3	MTEPS105(iii)	Power Quality	3	1	0	50	100	-	150
ELECTIVE-II									
1	MTEPS205(i)	AI Techniques	3	1	0	50	100		150
2	MTEPS205(ii)	Insulation Technology	3	1	0	50	100		150
3	MTEPS205(iii)	Advanced DSP	3	1	0	50	100		150
ELECTIVE-III									
1	MTEPS301(i)	Digital Control Systems	3	1	0	50	100		150
2	MTEPS301(ii)	Power System Reliability	3	1	0	50	100		150
3	MTEPS301(iii)	PLC Controllers and their Applications	3	1	0	50	100		150
ELECTIVE-IV									
1	MTEPS302(i)	Voltage Stability	3	1	0	50	100		150
2	MTEPS302(ii)	Power System Deregulation	3	1	0	50	100		150
3	MTEPS302(iii)	Demand-side Energy Management	3	1	0	50	100		150

(Signature)

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY (STRUCTURAL DESIGN)

SEMESTER-I

EFFECTIVE FROM 2012-13

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTSD 101	Material Technology	4	-	-	50	100	150	3
MTSD 102	Advanced Structural Analysis	4	-	-	50	100	150	3
MTSD 103	Pre-Stressed Concrete Design	4	-	-	50	100	150	3
MTSD 104	Design of Structures-I	4	-	-	50	100	150	3
	Elective- -I	4	-	-	50	100	150	3
MTSD 105	Structural Engineering Laboratory	-	-	3	50	50	100	3
MTSD 106	Computational Laboratory-I	-	-	3	50	50	100	3
TOTAL		20	-	6	350	600	950	

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the Examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A+, A, B, C, D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory and practical courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).


Registrar
Ganga Institute of Tech. & Mgt.
Kabiana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY (STRUCTURAL DESIGN)

SEMESTER-II

EFFECTIVE FROM 2012-13

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTSD 201	Structural Dynamics & Earthquake Engineering	4	-	-	50	100	150	3
MTSD 202	Stability of Structures	4	-	-	50	100	150	3
MTSD 203	Design of Structures-II	4	-	-	50	100	150	3
MTSD 204	Repairs and Rehabilitation of Structures	4	-	-	50	100	150	3
	Elective-II	4	-	-	50	100	150	3
MTSD 205	Structural Engineering Design Practice Lab	-	-	3	50	50	100	3
MTSD 206	Computational Laboratory-II	-	-	3	50	50	100	3
TOTAL		20	-	6	350	600	950	

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the Examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A+, A, B, C, D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory and practical courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY (STRUCTURAL DESIGN)

SEMESTER-III

EFFECTIVE FROM 2012-13

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTSD 301	Design of Structures- III	4	-	-	50	100	150	3
MTSD 302	Professional Practices	4	-	-	50	100	150	3
	Elective-III	4	-	-	50	100	150	3
MTSD 303	Computational Laboratory-III	-	-	3	50	50	100	3
MTSD 304	Seminar & Technical Writing	-	-	2	50	-	50	
MTSD 305	Dissertation Phase-I	-	-	4	100	-	100	
TOTAL		12	-	9	350	350	700	

NOTE:

1. The paper setter shall set each theory paper of 100 marks covering entire syllabus. However the Examiner shall evaluate the performance of the student in the theory paper finally by assigning one of the grades out of A+, A, B, C, D & E. The examination of practical courses shall also be evaluated on the basis of these grades.
2. The sessionals of theory and practical courses shall also be evaluated in the basis of these grades.
3. The choice of student for any elective shall not be binding on the department to offer it.
4. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s).


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

Maharshi Dayanand University, Rohtak

SCHEME OF STUDIES & EXAMINATION

MASTER OF TECHNOLOGY (STRUCTURAL DESIGN)

SEMESTER-IV

EFFECTIVE FROM 2012-13

Course No.	Course Title	Teaching Schedule			Marks		Total	Duration of Exam (Hrs)
		L	T	P	Sessional	Exam.		
MTSD 401	Dissertation	-	-	24	200	400	600	3
TOTAL			-	24	200	400	600	

NOTE:

1. The sessionals of Dissertation shall be evaluated on the basis of grades i.e A+,A,B,C,D & E.
2. The Dissertation shall be evaluated by an examination committee consisting of the head of the department, Dissertation Supervisor and one External examiner. The evaluation should be based on above grades.
3. The grading system is define at the end of scheme of studies & examinations and will be supplied by the University to the examiner(s)


Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

List of Electives:

Elective- I

MTSD 107 - Composite Structures

MTSD 108 - Analysis and Design of Plates & Shells

MTSD 109 - Advanced Foundation Design and Geotechnics

MTSD 110 - Material Science

Elective- II

MTSD 207- Advanced Steel Design

MTSD 208 - Advanced Reinforced Concrete Design

MTSD 209- Earth Retaining Structures

MTSD 210- Construction Failures

Elective- III

MTSD 306- High Rise Structures

MTSD 307- Design of Hydraulic Systems

MTSD 308- Design Of Bridges



Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.D.UNIVERSITY, ROHTAK

**SCHEME OF STUDIES AND EXAMINATION M.TECH 1st YEAR (ELECTRONICS & COMMUNICATION)
SEMESTER 1**

CBCS Scheme effective from 2016-17

Sl. No	Course Code	Subject	Credit Pattern				Examination Schedule (Marks)				Duration of Exam (Hours)	No of Hours /week
			L	T	P	Total Credits	Marks of Class work	Theory	Practical	Total		
1	16ECE21C1	Advance Microprocessor & Microcontroller	4	0	-	4	50	100	-	150	3	4
2	16ECE21C2	Satellite and Space Communication	4	0	-	4	50	100	-	150	3	4
3	16ECE21C3	Information and Communication Theory	4	0	-	4	50	100	-	150	3	4
4	16ECE21C4	Advanced Digital Signal Processing	4	0	-	4	50	100	-	150	3	4
5	16ECE21C5	Data Communication Networks	4	0	-	4	50	100	-	150	3	4
6	16ECE21C6	Seminar	-	-	-	2	50	-	-	50		2
7	16ECE21CL1	Satellite Lab	-	-	2	2	50	-	50	100	3	4
8	16ECE21CL2	Advance Microprocessor & Microcontroller Lab	-	-	2	2	50	-	50	100	3	4
TOTAL							26					

NOTE:

Examiner will set nine question in total. Question One will be compulsory and will comprise short answer type questions from all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

M.D.UNIVERSITY, ROHTAK
SCHEME OF STUDIES AND EXAMINATION M.TECH 1st YEAR (ELECTRONICS
& COMMUNICATION) SEMESTER 2
CBCS Scheme effective from 2016-17

SI No	Course No.	Subject	Credit Pattern				Examination Schedule (Marks)				Durat of Ex: (Hou
			I	T	P	Total Credi ts	Marks of Class works	Theory	Practical	Total	
1	16ECE22C1	Wireless Mobile Communication	4	0	-	4	50	100	-	150	3
2	16ECE22C2	Optical Communication	4	0	-	4	50	100	-	150	3
3	16ECE22C3	Seminar	-	-	-	2	50	-	-	50	
4	16ECE22CL1	VLSI Lab	-	-	2	2	50	-	50	100	3
5	16ECE22CL2	Optical Communication Lab	-	-	2	2	50	-	50	100	3
6	16ECE22D1 or 16ECE22D2 or 16ECE22D3 or 16ECE22D4	Elective-1	4	0	-	4	50	100	-	150	3
7		Open Elective				3					
8		Foundation Elective				2					
		TOTAL	23								

NOTE: Examiner will set nine questions in total. Question One will be compulsory and will comprise short answer type questions from all sections and remaining eight questions to be set by taking two questions from each unit. The students have to attempt five questions in total, first being compulsory and selecting one from each Unit.

Elective 1 : Choose any one from the following four papers:

16ECE22D1 - Electronic System Design

16ECE22D2 - Image Processing

16ECE22D3 - ADVANCED MATHEMATICS FOR ENGINEERS

16ECE22D4 - VLSI Design

Open Elective: A candidate has to select this paper from the pool of Open Electives provided by the University.

Foundation Elective: A candidate has to select this paper from the pool of Foundation Electives provided by the University.

Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar

M.DUNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 2nd YEAR (ELECTRONICS & COMMUNICATION)
SEMESTER 3rd
CBCS Scheme effective from 2017-18

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				Duration of Exam (Hours)	No of Credits
			L	T	P	Total	Marks of Class works	Theory	Practical	Total		
1	17ECE23C1	Neural Networks & Fuzzy Logics	4	0	-	4	50	100	-	150	3	4
2	17ECE23C2	CDMA	4	0	-	4	50	100	-	150	3	4
3	17ECE23C3	DISSERTATION (PHASE-I)	-	-	-	4	100	-	-	100		2
4	17ECE23C4	Seminar	-	-	-	2	50	-	-	50		2
5	17ECE23CL1	Project	-	-	2	2	50	-	50	100		2
6	17ECE23CL2	MATLAB Lab	-	-	2	2	50	-	50	100		2
7		OPEN ELECTIVE										3
		TOTAL										21

NOTE:

- Students will be allowed to use non-programmable scientific calculator. However, sharing of Calculator will not be permitted in the examination.**
- Students have to publish a research paper in a journal / conference on the basis of literature survey done in the semester.**

OPEN ELECTIVE: A candidate has to select this paper from the pool of open electives provided by the University.


 Registrar
 Ganga Institute of Tech. & Mgt.
 Kablana, Jhajjar

M.D UNIVERSITY
SCHEME OF STUDIES AND EXAMINATION
M.TECH 2nd YEAR (ELECTRONICS & COMMUNICATION)
SEMESTER 4th
CBCS Scheme effective from 2017-18

Sl. No	Course No.	Subject	Teaching Schedule				Examination Schedule (Marks)				No of Credits
			L	T	P	Total	Marks of Class works	Theory	Practical	Total	
	17ECE24C1	Dissertation and viva	-	-	-	-	250	-	500	750	20
		TOTAL	-	-	-	-	250	-	500	750	
		GRAND TOTAL									

NOTE:

1. Students have to publish a research paper in a journal / conference of the research work done in the semester.



Registrar
Ganga Institute of Tech. & Mgt.
Kablana, Jhajjar