

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

***[For batch admitted in Academic Session 2017-18]***

**Semester-Wise Scheme & Guidelines for Flexible Curriculum**  
**Abbreviations used**

<b>L</b>	<b>Lecture</b>
<b>T</b>	<b>Tutorial</b>
<b>P</b>	<b>Practical</b>
<b>HSMC</b>	<b>Humanities and Social Sciences including Management Courses</b>
<b>BSC</b>	<b>Basic Science Courses</b>
<b>ESC</b>	<b>Engineering Science Courses</b>
<b>DC</b>	<b>Departmental Core</b>
<b>DE</b>	<b>Departmental Elective</b>
<b>OC</b>	<b>Open Category</b>
<b>DLC</b>	<b>Departmental Laboratory Courses</b>
<b>MC</b>	<b>Mandatory Course</b>
<b>PD</b>	<b>Professional Development</b>
<b>MOOC</b>	<b>Massive Open Online Courses</b>

**Definition of Credit :**

<b>1 Hour Lecture (L) per week</b>	<b>1 credit</b>
<b>1 Hour Tutorial (T) per week</b>	<b>1 credit</b>
<b>2 Hours Practical (Lab) per week</b>	<b>1 credit</b>

### **General Guidelines for Flexible Curriculum**

(For batch admitted in 2017-18)

- For the award of basic Under Graduate (UG) Degree in Engineering/Technology (without Honours/Honours with Minor Specialization), it is required to earn **170 Credits**. For the B. Architecture Degree the total credit requirement is **260**.
- The students can opt up to **34 credits out of these 170 from recognized MOOC** (Massive Open Online Courses) platforms against Departmental & Open elective courses (DE/OC). Each such Course must be of minimum 2 credits.
- There is a provision for interested students to opt for **additional 20 credits** to obtain **Honours or Honours with Minor Specialization in chosen field**. These additional courses can be selected and opted from the list of courses approved by the department through their recognized bodies.
- In the flexible curriculum there is a provision of **03 Mandatory Credit Courses on Cyber Security, Disaster Management, & Intellectual Property Rights**.
- In the flexible curriculum presently there is a provision of **02 Audit Courses** on **(i) Biology for Engineers & (ii) Indian Constitution & Traditional Knowledge**. Auditing a course allows a student to take a class without the benefit of a grade or credit, for the sole purposes of self-enrichment and academic exploration.
- The students have to undergo three **Mandatory Summer Internship Programme/Projects (SIPs)** after their I, II and III year and their evaluation will reflect in III, V & VII semester examination results, respectively.
- Credit will be given for **“Professional Development”** of students in order to bring their all kinds of personality and skill development activities into the orbit and to encourage student participation in professional chapter activities, club activities, cultural events, sports, technical events, hackathons, personality development activities etc.
- The marks for **“Professional Development”** will be awarded to students in VIII semester on the basis of their participation and achievements in extra & co-curricular activities, sports, performance in MOOCs etc. right from I year.

**Guidelines for students opting additional courses for (i) B.Tech. Honours degree or (ii) B.Tech. Honours degree with Minor Specialization**

- For getting an (i) **B.Tech Honours** in parent discipline or (ii) **B.Tech Honours with Minor Specialization** in other interdisciplinary areas/fields of Engineering, Technology, Applied Science, Management etc. **which are offered by the Institute**, the **additional Credit requirement is 20 for Engineering & Technology students** i.e. **Total 170 + 20 = 190** credits needed by the end of VIII semester.
- For students desirous of achieving additional credits for Honours/Honours with Minor Specialization, there is a provision of selecting maximum 02 courses per semester from V semester onwards. Each such Course must be of minimum 2 credits.
- These additional courses can be selected only from the pool of courses specified by the department from recognized SWAYAM/NPTEL/MOOC platforms.

**Credit Requirements & Guidelines for MOOCs**

- Up to 34 Credits out of total 170 for Engineering/Technology students & 52 credits out of total 260 credits for B. Architecture students can be earned through SWAYAM/NPTEL/MOOC platform based learning for the award of UG degree in Engineering/Technology & Architecture respectively (**without Honours/Honours with Minor Specialization**).
- To obtain **Honours or Honours with Minor Specialization 20 credits** additionally can be acquired through SWAYAM/NPTEL/MOOC platform based learning.
- In this manner, students aspiring for **Honours or Honours with Minor Specialization during the tenure of B. Tech programme** can opt for a total of **54 (34+20) Credits** and the students of the **B. Architecture programme** can earn up to **72 (52+20) credits** through SWAYAM/NPTEL/MOOC platform based learning.
- For the courses opted under MOOC, the equivalent credit weightage will be given to the students, for the credits earned in online examination on SWAYAM/NPTEL platform and other similar platforms as approved by the authorized bodies (BoS, AC etc.), in the credit plan of the program.
- Policy for credit equivalence and transfer for the courses opted from SWAYAM/NPTEL/University of Central Florida (UCF)/RGPV Bhopal/Institutional (MITS) MOOC/other MOOC (Massive Open Online Courses) platforms, is as follows :

**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
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Duration of MOOC	Credit Transfer
04 week course	01*
06 week course	02**
08 week course	03**
12 week course	04**

\* *The 01 credit courses can be opted only under seminar/self-study/professional development purposes.*

\*\* *The 02, 03 & 04 credit courses can be opted under DEs/OCs and additional courses (for Honours/Honours with Minor Specialization).*

- The guidelines regarding “credit transfer from MOOCs” by All India Council of Technical Education (AICTE) and the affiliating university, i.e. RGPV Bhopal, as issued from time to time will be binding on the institute.

**Guidelines for Departmental Elective (DEs) and Open Category Courses (OCs)**

- The list of Departmental/Open Elective Courses (DEs/OCs) will be prepared well in advance and make the list public among the students, possibly in the previous semester itself for preference based registration process.
- The list of courses which the students can opt from the SWAYAM/NPTEL/MOOC platform against DE & OC courses in the scheme will be approved by authorized bodies (BoS, AC etc.) and displayed/communicated to students/on the website well in advance, (in September/October & April/May for even and odd semesters respectively) so that students can select the courses of their choice. Each such Course must be of minimum 2 credits.
- The Open Category (OC) course will be open for students of departments other than the offering (parent) department. Moreover, there will be no pre-requisite for Open Category Courses.
- **The allotment of DE/OC Courses will be based on First Come First Serve (FCFS) basis.**
- The weightage of continuous assessment (Mid Semester Exam, Quiz, Assignment etc.) for DE/OC courses which are opted from MOOCs will be considered from the score obtained towards assignment work/test etc. conducted by the course offering agency
- For matching the credit requirement with the curricular/scheme requirements, more than one MOOC course can also be selected against an Elective Course, provided that the collective credits are equal to or more than the credit requirement; however each such selected course must be of minimum 2 credits.

### **Mandatory Summer Internship Programme**

- The students have to undergo three **Mandatory Summer Internship Programme/Projects (SIPs)** after the I, II and III year and their evaluation will reflect in III, V, & VII semester examination results.
- In case, **a student fails to appear (due to valid cause)/acquire minimum score, the Head of Concerning Department may schedule the re-conduction of internship program** for such students and the same will be monitored and **reviewed by the Dean Student Welfare**. Such students are required to fill the examination form for III/V semester in order to get the marks/credits reflected in their mark-sheet, which will also clearly indicate the year of completion of Internship.
- The promotion to successive semesters/years will not be affected for students who are not able to complete these requirements in time. However, **they will not be awarded the degree until they complete these mandatory Summer Internship programs (SIPs)**.
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### **Provision of Internship/Project**

- All the courses offered in VIII semester are DE (Departmental Elective) and OC (Open Category) courses, which will run through online learning platform under the mentorship of faculty members.
- The students can opt for internship/project in the VIII Semester by either making a project or by doing internship in an industry after formal approval of the Institute as well as the concerned industry.

### **Awareness about Ethics & Academic Integrity**

#### **Criteria for accepting similarity index for the submission of UG project report/PG dissertation/Thesis**

- **The overall similarity index up to 15-20% is acceptable** (using turnitin plagiarism check software).
- The highest similarity percentage from **any one source is not greater than 4-6%**.
- In case of self plagiarism, the permissible percentage may be **slightly higher, say at 7-10%**.

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**Guidelines for evaluating “Professional Development”**

PERFORMANCE METRICS		
Categories	Suggestive Activities	Marks Assigned
<b>Institute Level*</b> (C1)	Participation in Institute level technical events such as quizzes, extemporary, debate, student volunteers, seminar, professional society local chapters (IET,IEEE,ISTE,IETE),NCC etc.	(02 Marks for each participation) Marks=Number of activities (C1) x 2  <b>(Maximum marks in this category 06)</b>
<b>State Level*</b> (C2)	Participation in State level technical events such as Robotics, Coding challenge, Cultural cum technical fest, technical symposium, volunteers, hackathon, sports etc.	03 marks for each participation Number of Marks=Number of activities (C2) x 3  <b>(Maximum marks in this category 09)</b>
<b>National level*</b> (C3)	Participate in National level events such as hands on workshop, national level seminar, national conference, Entrepreneurship, model making, techno culture fest, national youth festival, research conclave, project competition, volunteers, sports festival etc.	05 marks for each participation (Maximum 15) Marks=Number of activities (C3) x 5  <b>(Maximum marks in this category 15)</b>
<b>MOOC’s**</b> (C4)	Successfully completed technical certification course in any MOOC’s platform such as (NPTEL/SWAYAM/EdX/Coursera/Class Central etc)	10 marks for each course (Maximum 20) Marks= Number of certificates (C4) x 10  <b>(Maximum marks in this category 20)</b>
Evaluation in VIII Semester		
Formula	Marks Scored (Out of 50)	
$(C1 \times 2 + C2 \times 3 + C3 \times 5 + C4 \times 10) =$		

In addition to the above, if a student or group of students win a competition in the above three categories (Institute level/State level/National level etc.) then maximum marks in the respective category will be awarded to such students.

**Note: \*** Student must produce a certificate as a proof for each activity.

**\*\*** Courses for which credits are already earned (for DE/OC/Honours or Minor Specialization from I to VIII semester) through MOOCs by the student during academics will not be counted.

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**Proposed Structure of Undergraduate Engineering Program**

S. No.	Category	Suggested Breakup of Credits (Total 160) (as proposed by AICTE)	Component wise credit allotment (To be calculated by the concerned Department) No. of Courses
1	Humanities and Social Sciences including Management Courses (HSMC)	<b>12**</b>	<b>14</b>
2	Basic Science Courses (BSC)	<b>25**</b>	<b>25</b>
3	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc. (ESC)	<b>24**</b>	<b>31</b>
4	Departmental Core Courses (DC)	<b>48**</b>	<b>49</b>
5	Departmental Elective Courses relevant to specialization/branch (DE)	<b>18**</b>	<b>10</b>
6	Open Category- Electives from other technical and /or emerging subjects (OC)	<b>18**</b>	<b>12</b>
7	Project work, seminar and internship in industry or appropriate work place/ academic and research institutions. (DLC/SWAYAM/NPTEL/MOOC-Practical Slot)	<b>15**</b>	<b>21</b>
8	Mandatory Course (MC)	-	<b>7</b>
9	Professional Development (PD)	-	<b>1</b>
	<b>Total</b>	<b>160**</b>	<b>170</b>

**\*\* Minor variation is allowed as per need of the respective disciplines. Please consult the AICTE model curriculum as a standard reference, if needed.**

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## Scheme of Examination (B.Tech.)

### GROUP A : I Semester & GROUP B : II Semester *[For batch admitted in Academic Session 2017-18]*

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/ Assignment	End Sem.	Lab work & Sessional					
1.	100201	BSC	Engineering Physics (BSC-1)	70	20	10	30	20	150	4	1	2	6
2.	100202	HSMC	Energy, Environment, Ecology & Society (HSMC-1)	70	20	10	-	-	100	4	1	-	5
3.	100203	ESC	Basic Computer Engineering (ESC-1)	70	20	10	30	20	150	4	1	2	6
4.	100204	ESC	Basic Mechanical Engineering (ESC-2)	70	20	10	30	20	150	4	1	2	6
5.	100205	ESC	Basic Civil Engineering & Mechanics (ESC-3)	70	20	10	30	20	150	4	1	2	6
6.	100206	HSMC	Language Lab. & Seminars (HSMC-2)	-	-	-	30	20	50	-		2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>100</b>	<b>750</b>	<b>20</b>	<b>5</b>	<b>10</b>	<b>30</b>
<b>Induction programme of First Three Weeks (MC) : Physical Activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to Local Areas, Familiarization to Dept./Branch &amp; Innovations</b>													

**GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)**

**GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)**

**01 Theory Period = 1 Credit; 02 Practical Periods = 1 Credit**

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## Scheme of Examination (B.Tech.)

### GROUP A:II Semester & GROUP B:I Semster *[For batch admitted in Academic Session 2017-18]*

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Lab work & Sessional					
1.	100101	BSC	Engineering Chemistry (BSC-2)	70	20	10	30	20	150	4	1	2	6
2.	100102	BSC	Mathematics-I (BSC-3)	70	20	10	-	-	100	4	1	-	5
3.	100103	HSMC	Technical English (HSMC-3)	70	20	10	30	20	150	4	1	2	6
4.	100104	ESC	Basic Electrical & Electronics Engineering (ESC-4)	70	20	10	30	20	150	4	1	2	6
5.	100105	ESC	Engineering Graphics (ESC-5)	70	20	10	30	20	150	4	1	2	6
6.	100106	ESC	Manufacturing Practices (ESC-6)	-	-	-	30	20	50	-	-	2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>150</b>	<b>100</b>	<b>750</b>	<b>20</b>	<b>5</b>	<b>10</b>	<b>30</b>
<b>Summer Internship Project –I (Institute Level) (Qualifier) : Minimum two-week duration</b>													

**GROUP A : (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)**

**GROUP B : (Civil, Mechanical, Chemical, Biotech, Automobile)**

**01Theory Period = 1 Credit; 02 Practical Periods = 1 Credit**

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**Scheme of Examination (B.Tech.)**

**III Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Term work					
								Lab Work & Sessional					
1.	100001	BSC	Mathematics-II (BSC-4)	70	20	10	-	-	100	3	1	-	4
2.	150302	DC	DC-1	70	20	10	-	-	100	3	1	-	4
3.	150303	DC	DC-2	70	20	10	30	20	150	3	-	2	4
4.	150304	DC	DC-3	70	20	10	30	20	150	3	-	2	4
5.	150305	DC	DC-4	70	20	10	30	20	150	3	-	2	4
6.	150306*	DLC	DLC-1	-	-	-	30	20	50	-	-	2	1
7.	150307#	SEMINAR/ SELF STUDY	Self-learning/Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	-	25	25	-	-	2	1
8.	150308	DLC	Summer Internship Project –I (Institute Level) (Evaluation)	-	-	-	25	-	25			4	2
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>145</b>	<b>105</b>	<b>750</b>	<b>15</b>	<b>2</b>	<b>14</b>	<b>24</b>
9.	100002 <sup>§</sup>	Audit Course	Biology for Engineers (Audit Course-1)	70	20	10	-	-	100	3		-	-
<b>NSS/NCC</b>				<b>Qualifier</b>									

\*Virtual Lab to be conducted along with the traditional lab.

# Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation.

§ Course will run for Group A/B in III/IV semester respectively. Passing is optional; however a separate mark sheet will be issued to those who qualify.

GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)

GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

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**Scheme of Examination (B.Tech.)**

**IV Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam.	Quiz/ Assignment	End Sem.	Term work					
								Lab Work & Sessional					
1.	100003	BSC	Mathematics- III (BSC-5)	70	20	10	-	-	100	2	2	-	4
2.	150402	DC	DC-5	70	20	10	30	20	150	2	1	2	4
3.	150403	DC	DC-6	70	20	10	30	20	150	2	1	2	4
4.	150404	DC	DC-7	70	20	10	-	-	100	3	1	-	4
5.	150405	DC	DC-8	70	20	10	-	-	100	3	1	-	4
6.	100004	MC	Cyber Security	70	20	10	-	-	100	2	1	-	3
6.	150407*	DLC	DLC-2	-	-	-	30	20	50	-	-	4	2
<b>Total</b>				<b>420</b>	<b>120</b>	<b>60</b>	<b>90</b>	<b>60</b>	<b>750</b>	<b>15</b>	<b>7</b>	<b>8</b>	<b>25</b>
NSS/NCC				Qualifier									
<b>Summer Internship Project-II (Soft Skills Based) for two weeks duration : Evaluation in V Semester</b>													

\*Virtual Lab to be conducted along with the traditional lab

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**Scheme of Examination (B.Tech.)**

**B.Tech. V Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/ Assignment	End Sem.	Lab work & Sessional					
1.	100005*	HSMC	Ethics, Economics, Entrepreneurship & Management (HSMC-4)	70	20	10	-	-	100	2	-	-	2
2.	150502	DC	DC-09	70	20	10	-	-	100	2	1	-	3
3.	150503	DC	DC-10	70	20	10	30	20	150	2	-	2	3
4.	150504	DC	DC-11	70	20	10	30	20	150	2	-	2	3
5.	150505	DC	DC-12	70	20	10	30	20	150	2	-	2	3
6.	150506**	DLC	Minor Project-I (DLC-3)	-	-	-	30	20	50	-	-	2	2
7.	150507	DLC	Summer Internship Project-II (Evaluation) (DLC-4)	-	-	-	25	-	25	-	-	4	2
8.	150508 <sup>#</sup>	SEMINAR/ SELF STUDY	Self-learning/Presentation (SWAYAM/NPTEL/MOOC)	-	-	-	15	10	25	-	-	2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>140</b>	<b>110</b>	<b>750</b>	<b>10</b>	<b>1</b>	<b>14</b>	<b>19</b>
9.	100006 <sup>§</sup>	Audit Course	Indian Constitution & Traditional Knowledge (Audit Course-2)	70	20	10	-	-	100	3		-	-
Additional Courses for obtaining Honours/Honours with Minor Specialization by desirous students			Permitted to opt for <u>maximum two additional courses</u> for the award of (i) Honours in parent discipline or (ii) Honours with Minor Specialization in engineering discipline other than the parent discipline										

\* Group A/B programmes will offer this course in V/VI Semester respectively.

\*\* The minor project-I may be evaluated by an internal committee for awarding sessional marks.

# Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance, assignments and presentation

§ Group A/B programmes will offer this course in V/VI Semester respectively. Passing is optional; however a separate mark sheet will be issued to those who qualify.

GROUP A: (Electrical, Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication)

GROUP B: (Civil, Mechanical, Chemical, Biotech, Automobile)

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**Scheme of Examination (B.Tech.)**

**B.Tech. VI Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem Exam.	Quiz/ Assignment	End Sem.	Lab work & Sessional					
1.	150601	DC	DC-13	70	20	10	30	20	150	2	-	2	3
2.	150602	DC	DC-14	70	20	10	-	-	100	2	-	-	2
3.	150603*	DE	DE-1	70	20	10	-	-	100	2	-	-	2
4.	150604*	DE	DE-2	70	20	10	-	-	100	2	-	-	2
5.	150605*	OC	OC-1	70	20	10	-	-	100	2	-	-	2
6.	100007	MC	Disaster Management	70	20	10	-	-	100	2	-	-	2
7.	150607	DLC	Minor Project-II (DLC-5)	-	-	-	50	50	100	-	-	4	2
<b>Total</b>				<b>420</b>	<b>120</b>	<b>60</b>	<b>80</b>	<b>70</b>	<b>750</b>	<b>12</b>	<b>-</b>	<b>6</b>	<b>15</b>
<b>Summer Internship-III (On Job Training) for Four weeks duration: Evaluation in VII Semester</b>													
Additional Courses for obtaining Honours/Honours with Minor Specialization by desirous students			Permitted to opt for <u>maximum two additional courses</u> for the award of (i) Honours in parent discipline or (ii) Honours with Minor Specialization in engineering discipline other than the parent discipline										

\* At least one of these courses must be run through SWAYAM/NPTEL/ MOOC

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
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**Scheme of Examination (B.Tech.)**

**B.Tech. VII Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name & Title	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam	Quiz/ Assignment	End Sem.	Term Work Lab Work & Sessional					
1.	150701	DE	DE-3	70	20	10	-	-	100	2	-	-	2
2.	150702*	DE	DE-4	70	20	10	-	-	100	2	-	-	2
3.	150703	OC	OC-2	70	20	10	-	-	100	2	1	-	3
4.	150704	OC	OC-3	70	20	10	-	-	100	3	-	-	3
5.	100008	MC	Intellectual Property Rights (IPR)	70	20	10	-	-	100	2	-	-	2
6.	150706	DLC	Departmental Lab (DLC-6)	-	-	-	50	50	100	-	-	4	2
7.	150707	DLC	Summer Internship Project-III (DLC-7) (04 weeks) (Evaluation)	-	-	-	50	50	100	-	-	4	2
8.	150708	DLC	Creative Problem Solving (DLC-8) (Evaluation)	-	-	-	25	25	50	-	-	2	1
<b>Total</b>				<b>350</b>	<b>100</b>	<b>50</b>	<b>125</b>	<b>125</b>	<b>750</b>	<b>11</b>	<b>1</b>	<b>10</b>	<b>17</b>
Additional Courses for obtaining Honours/Honours with Minor Specialization by desirous students			Permitted to opt for <u>maximum two additional courses</u> for the award of (i) Honours in parent discipline or (ii) Honours with Minor Specialization in engineering discipline other than the parent discipline										

\*This course must be run through SWAYAM/NPTEL/ MOOC

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**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

**Scheme of Examination (B.Tech.)**

**B.Tech. VIII Semester [For batch admitted in Academic Session 2017-18]**

S. No.	Subject Code	Category	Subject Name & Title	Maximum Marks Allotted					Total Marks	Contact Hours per week			Total Credits
				Theory Slot			Practical Slot			L	T	P	
				End Sem.	Mid Sem. Exam	Quiz/ Assignment	End Sem.	Term Work Lab Work & Sessional					
1.	150801*	DE	DE-5	70	20	10	-	-	100	2	-	-	2
2.	150802*	OC	OC-4	70	20	10	-	-	100	2	-	-	2
3.	150803*	OC	OC-5	70	20	10	-	-	100	2	-	-	2
4.	150804	DLC	Internship/Project (DLC-9)	-	-	-	250	150	400	-	-	6	3
5.	150805 <sup>#</sup>	PD	Professional Development	-	-	-	-	50	50	-	-	2	1
<b>Total</b>				<b>210</b>	<b>60</b>	<b>30</b>	<b>250</b>	<b>200</b>	<b>750</b>	<b>6</b>	<b>-</b>	<b>8</b>	<b>10</b>
Additional Courses for obtaining Honours/Honours with Minor Specialization by desirous students			Permitted to opt for <u>maximum two additional courses</u> for the award of (i) Honours in parent discipline or (ii) Honours with Minor Specialization in engineering discipline other than the parent discipline.										

\*All of these courses will run through SWAYAM/NPTEL/ MOOC.

<sup>#</sup>Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical and other events during the complete tenure of the UG program (participation in professional chapter activities, club activities, cultural events, sports, and personality development activities, collaborative events, MOOCs and technical events).

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