



**ARKA JAIN University**  
Jharkhand (Jamshedpur)

Recognized by **UGC**  
Approved by **AICTE**

Scheme of Study of the Program

**Diploma - Mechanical Engineering (DME)**

Semester I,II,III,IV,V & VI

(w.e.f Batch 2017)

**SEMESTER-I**

Sl No.	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/Practical Exam	Mid Term Theory/Practical Exam	CIA	Attendance
1	Communication Skills in English -1*	3	3	100	70	20	5	5
2	Engineering Maths-1 \$	4	4	100	70	20	5	5
3	Applied Science \$	4	4	100	70	20	5	5
4	Engineering Graphics -1 #	3	3	100	70	20	5	5
5	Basic Computer Skills #	3	3	100	70	20	5	5
6	Applied Science Lab \$	1	2	50	35	5	5	5
7	Engineering Graphics Lab #	2	4	50	35	5	5	5
8	Basic Computer Skills Lab #	1	2	50	35	5	5	5
9	Workshop Practice Lab –I #	2	4	50	35	5	5	5
	<b>Total</b>	<b>23</b>	<b>29</b>	<b>700</b>	<b>490</b>	<b>120</b>	<b>45</b>	<b>45</b>

**SEMESTER-II**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/Practical Exam	Mid Term Theory/Practical Exam	CIA	Attendance
1	Communication Skills in English - 2 *	3	3	100	70	20	5	5
2	Engineering Maths - 2 \$	4	4	100	70	20	5	5
3	Basics of Electrical& electronics engg. #	4	4	100	70	20	5	5
4	Engineering Graphics - 2 #	3	3	100	70	20	5	5
5	Fundamentals of Programming Using C #	3	3	100	70	20	5	5
6	Basic of electrical & electronics engg. Lab #	1	2	50	35	5	5	5
7	Engineering Graphics Lab-2 #	2	4	50	35	5	5	5
8	Fundamentals of Programming Using C Lab #	1	2	50	35	5	5	5
9	Workshop Practice Lab–II #	2	4	50	35	5	5	5
	<b>Total</b>	<b>23</b>	<b>29</b>	<b>700</b>	<b>490</b>	<b>120</b>	<b>45</b>	<b>45</b>

**SEMESTER-III**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA	Attendance
1	Applied Mathematics \$	4	4	100	70	20	5	5
2	Strength of Material **	4	4	100	70	20	5	5
3	Mechanical Engineering Material **	3	3	100	70	20	5	5
4	Electrical Engineering #	3	3	100	70	20	5	5
5	Thermal Engineering **	4	4	100	70	20	5	5
6	Strength of Material Lab **	2	4	50	35	5	5	5
7	Electrical Engineering Lab #	2	4	50	35	5	5	5
8	Workshop Practice Lab-3 **	2	4	50	35	5	5	5
	<b>Total</b>	<b>24</b>	<b>30</b>	<b>650</b>	<b>455</b>	<b>115</b>	<b>40</b>	<b>40</b>

**SEMESTER-IV**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA	Attendance
1	Theory of Machines & Mechanics #	4	4	100	70	20	5	5
2	Machine Drawing #	3	3	100	70	20	5	5
3	Production & Costing #	3	3	100	70	20	5	5
4	Manufacturing Technology – I #	3	4	100	70	20	5	5
5	Fluid Mechanics & Machinery #	3	3	100	70	20	5	5
	<b>Practical</b>							
6	Fluid Mechanics & Machinery Lab	2	2	50	35	5	5	5
7	Manufacturing Technology Lab	2	2	50	35	5	5	5
8	Machine Drawing Lab	2	2	50	35	5	5	5
	<b>Total</b>	<b>22</b>	<b>23</b>	<b>650</b>	<b>455</b>	<b>115</b>	<b>40</b>	<b>40</b>

**SEMESTER V**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam/Internal	CIA	Attendance
1	Advance manufacturing Process#	4	4	100	70	20	5	5
2	Power Engineering#	3	3	100	70	20	5	5
3	Measurements & control#	3	3	100	70	20	5	5
4	Elective –I(Tool engg./Automobile Engg./Power Plant Engg./Mechatronics ) #	3	4	100	70	20	5	5
5	Metrology & quality Control#	3	3	100	70	20	5	5
6	Power Engineering Lab	2	2	50	35	5	5	5
7	Metrology & quality Control Lab	2	2	50	35	5	5	5
8	Industrial Project & Entrepreneurship Development(In plant training & visit to work)	4	4 weeks summer training	100	50	50	-	-
	<b>Total</b>	<b>24</b>	<b>21</b>	<b>700</b>	<b>470</b>	<b>160</b>	<b>35</b>	<b>35</b>

**SEMESTER VI**

S.No	Name of the Subject	Credit	Contact Hours Per Week	Total Marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA	Attendance
1	Management	3	3	100	70	20	5	5
2	Design of Machine Elements	4	4	100	70	20	5	5
3	Industrial Fluid Power	3	3	100	70	20	5	5
4	Manufacturing Technology -II	3	3	100	70	20	5	5
5	Elective –II (Alternate Energy Sources & Management /Material Handling system/ Refrigeration & Air Conditioning/CAD-CAM & Automation/AUTO CAD)	3	3	100	70	20	5	5
6	Design of Machine Elements Lab	2	2	50	35	5	5	5
7	Manufacturing Technology –II Lab	2	2	50	35	5	5	5
8	Project Work & Its Presentation in Seminar	4	4	100	50	50		
	<b>Total</b>	<b>24</b>	<b>24</b>	<b>700</b>	<b>470</b>	<b>160</b>	<b>35</b>	<b>35</b>

\*Humanities and Social Sciences (HS)

\$ Basic Sciences(BS)

#Engineering Sciences (ES)

\*\*\*CIA - Continuous Internal Assessment - Based on Class Test / Assignment

Note : Approved by BOS on dated 11.08.2017 &amp; Approved by Academic Council on Dated 17.08.2017