

DAYANANDA SAGAR UNIVERSITY

ShavigeMallehwara Hills, Kumaraswamy Layout,
Bengaluru - 560078, Karnataka.

SCHOOL OF ENGINEERING



DEPARTMENT OF MECHANICAL ENGINEERING

**SCHEME & SYLLABUS
FOR
B.Voc in Tool Engineering - 2019**

(1st to 6th Sem)

(WITH EFFECT FROM 2019 - 20)

B.Voc in Tool Engineering

Semester – 1

General Education Components: 12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1.	17VT101	English-I	2	30
2.	17VT102	Mathematics-I	2	30
3.	17VT103	Applied Science	2	30
4.	17VT104	Production Technology -I	3	45
5	17VT105	Quality Management-I	3	45
Skill Components :18 Credits,270h				
1.	17VT106	Engineering Drawing and CAD-I	6	90
2.	17VT107	Work Shop -I	9	135
3.	17VT108	Quality Management lab-I	3	45

Semester – 2

General Education Components :12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1.	17VT201	English-II	2	30
2.	17VT202	Mathematics-II	2	30
3.	17VT203	Production Technology – II	2	30
4.	17VT204	Basic Electrical & Electronics	2	30
5	17VT205	Material Technology-I	2	30
6	17VT206	Quality Management-II	2	30
Skill Components :18 Credits,270h				
1.	17VT207	Engineering Drawing and CAD-II	5	75
2.	17VT208	Work Shop-II	8	120
3.	17VT209	Electrical & Electronics lab	2	30
4.	17VT210	Quality Management lab-II	3	45

B.Voc in Tool Engineering

Semester – 3

General Education Components: 12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1	17VT301	Production Technology -III	2	30
2	17VT302	Material Technology & Heat Treatment	2	30
3	17VT303	Strength of Materials-I	2	30
4	17VT304	Press Tool Technology-I	2	30
5	17VT305	Jigs & Fixtures	2	30
6	17VT306	Quality Management-III	2	30
Skill Components :18 Credits,270h				
7	17VT307	Work Shop –III	6	90
8	17VT308	Tool design drawing-I	6	90
9	17VT309	Materials laboratory	4	60
10	17VT310	Quality Management lab-III	2	30
Audit Course				
11	17VT311	Constitution and Ethics		

Semester – 4

General Education Components :12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1.	17VT401	Mould technology	2	30
2.	17VT402	Production technology-IV	2	30
3.	17VT403	Strength of Materials-II	2	30
4.	17VT404	Press Tool Technology-II	2	30
5	17VT405	Pneumatic & Hydraulics	2	30
6	17VT406	CNC Technology	2	30
Skill Components :18 Credits,270h				
7	17VT407	Work Shop -IV	8	120
8	17VT408	Tool design drawing-II	4	60
9	17VT409	Pneumatic & Hydraulics Lab	6	90
Audit Course				
10	17VT411	Kannada Language*		

B.Voc in Tool Engineering

Semester – V

General Education Components: 12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1.	17VT501	Press Tool Technology-III	03	45
2.	17VT502	Mould Technology-II	03	45
3.	17VT503	Production Management control	02	30
4.	17VT504	CNC Technology	02	30
5	17VT51X	Elective-I	02	30
Skill Components :18 Credits,270h				
1.	17VT506	Tool Design Drawing-III	06	90
2.	17VT507	Workshop Practical-V	06	90
3.	17VT508	Injection mold and press tool design using CAD Software	06	90

Audit Course:

1	17VT509	Environmental Science	---	15
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Course Code	Elective-I
17VT511	Advanced Mold Techniques
17VT512	Additive Manufacturing

Semester – VI

General Education Components :12 Credits,180h				
Sl.No.	Subject Code	Subject Name	Credits	Hours
1.	17VT601	Press Tool Technology-IV	03	45
2.	17VT602	Mould Technology-III	03	45
3.	17VT603	Estimation & Costing	02	30
4.	17VT604	Industrial Management	02	30
5	17VT61X	Elective -II	02	30
Skill Components :18 Credits,270h				
1.	17VT606	Tool Design Drawing-IV	06	90
2.	17VT607	Workshop Practical-VI	04	60
3.	17VT608	Project work	08	120

Course Code	Elective-II
17VT611	Lean Manufacturing Systems
17VT612	Quality and Reliability Engineering