



**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Syllabus for Bachelor of Vocation (B.Voc), 4<sup>th</sup> Semester**  
**Branch: Production Technology**  
**Subject Name: Tool and Die Making Laboratory**  
**Subject Code: 1140305**

**With effective  
from academic  
year 2018-19**

**Type of course:** Under Graduate

**Prerequisite:** Zeal to learn the subject

**Rationale:** Productivity and quality of machining operations may further be enhanced by proper and quick mounting of tools and jobs on machines. Jigs and fixture plays an import roll in this process. Therefore this course attempts to develop abilities in students to select a tool of proper size and shape for required machining operation. The design of cutting tools, jigs and fixtures are also dealt with in this course.

**Teaching and Examination Scheme:**

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
0	0	04	4	0	0	30	20	50

Sr. No.	Topic	No. of Hours
1.	Manufacture of Box Jig and Angle plate jig	08
2.	Manufacture of “V” Block angle grinding Fixtures and profile milling fixture	04
3.	Manufacture of simple Blanking & piercing Tool	04
4.	Manufacture of Progressive tool for producing a Cycle chain link	04
5.	Manufacture of Press tools like Combination tool & Compound tool	04
6.	Manufacture of Draw tool	04
7.	Trial out On Fly press and power press the Produced components such as V, U, Cycle link, Cup ,Washer and Cycle bell cup	04
8.	Manufacture of simple V and U bending tool	04
9.	Maintenance of Jig & fixture and press tool	04

**List of Open Source Software/learning website:**

<https://nptel.ac.in>,