

#### GANDHINAGAR INSTITUTE OF TECHNOLOGY

Information Technology Department Organize

# Pre IDP/UDP Exposure Program

Explaining the basic idea of IDP/UDP

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Conducted by

**IDP/UDP Committee** 

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## **Program Outline**

- Guidelines about IDP/UDP Process
- Industrial Shodh Yatra (ISY)
- Process for Approval of the Project Definition
- Basics of IPR
- Design and innovation and entrepreneurial initiatives of GTU
- Patent Search & Analysis Report (PSAR)
- Patent Drafting Exercise (PDE)
- Design Engineering Canvas activity
- Project Implementation & Report preparation
- Plagiarism Search Report
- GTU PMMS Portal

### Guidelines about IDP/UDP Process

### The Concept Of IDP and UDP

- The problem may be found by studying the products or processes of an industry through a Shodhyatra. A project based on such a problem is called an Industry Defined Project (IDP).
- A project may be based upon the needs of NGOs, informal sectors, Govt. organizations and society at large. Students can take a research problem identified by the Faculty Members or it could be the idea of student, which is approved by the Faculty Guide. Such a project is called a User Defined Project (UDP).

### Guidelines about IDP/UDP Process

#### What is an innovation?

- It has been suggested that, if one codified a particular challenge in a particular environment and tries to make new interventions, either in material, method or application, then it can lead to an innovation.
- "Conceptually, any innovation implies substantial improvement in the ways of doing things, producing goods or providing services. It may involve a new use of an existing resource or producing (or delivering) existing goods or services through new methods (or new instruments/materials)" (Gupta, 1992)

### Guidelines about IDP/UDP Process

#### Team Formation

• The students are required to form teams of 3 students for working on their Final Year project.

### For IDP Group:

- N.O.C. letter from the college
- Confirmation Letter from the company(with students details, project details)

#### **Team Registration Process**

Students have to provide their group details by filling online form.

Link of the online form will be provided after the completion of 6<sup>th</sup> sem GTU

Exam.

### Industrial Shodh Yatra (ISY)

- The visit to industries for study of a product or process is called an Industrial Shodh Yatra (ISY).
- The students are required to form teams of 3 students for working on their final year project. With the guidance of Faculty Members they will start working towards Industrial Shodh Yatra (ISY) to define a problem statement on which they will work for their final year project.
- ISY is beneficial for all students whether they want to work upon an IDP or a UDP. After ISY students need to decide with the guidance of their Faculty Guide whether to select an IDP or a UDP.

## Industrial Shodh Yatra (ISY)

 Industrial Shodh Yatra (ISY) is the course of action that leads a team of students towards a creative interaction with diverse users to discover a challenge/problem, the solution of which would lead to a better product or a more efficient process for a particular user or for a group of users or an industry. The suggested innovations may be incremental or disruptive.

## Industrial Shodh Yatra (ISY)

- Students team need to identify the domain (area of work) in which they would be interested in working during their Final Year project in consultation with stakeholders like Faculty Members, industry persons, experts etc.
- Students need to interact with multiple set of users while sampling the inputs while defining the IDP/UDP.
- One group should visit 3-4 such identified places to visit
- Adopt suitable measures based on design thinking to locate a challenge.
- After the first visit, the group shall return and discuss their experience and primary findings with the Faculty Guide.

 Every Final Year project is required to be innovative. It should not be repetitive or copied from previous projects. If the project definition, submitted by a student or a team of students, is found to be below expected quality, then the guide and HODs may ask the team to submit a new project with better possibilities.

#### Process:

- The proposed project quality should be up to the status of a BE final year project quality.
- The project should not be a conventional project and colleges can check past year projects through any other sources.
- The project should not be a purchased/3rd party developed project.
- If the project is being carried forwarded from previous years then it must add substantial value to the previously done work on the project.

#### Process:

- The project should be novel, original and having a possibility of good impact if the proposed solution get implemented.
- Even if student claim it to be an IDP, it should not be based on industry whose main objective is to make final year project and give it to students.
  - Businesses or industries having no concrete product/service delivery track record
  - Institutes, which are mainly in the business of giving training or providing coaching on various technical skills within or outside syllabus.
  - 3. Vendors/Institutes which make prototypes of various concepts and demonstrate to students as a part of training to serve their academic needs ]

### How to conduct project approval process in the college?

- Team Formation (3 students per group)
- Panel Allocation (4 faculty members per panel)
- Presentation for Approval of the project
- If majority of the panel members thinks that the proposed project is not appropriate for a BE project, the panel can revoke the project and ask the team of students to resubmit a new project definition within a stipulated time.

## Patent Search & Analysis Report (PSAR)

- Patent search in most systems of patent law constitutes all information that has been made available to the public in any form before a given date that might be relevant to a patent's claims of originality. Patent search is the process by which prior inventions or ideas are examined, with the goal being to find information that bears close similarity to a given patent or proposed invention.
- The documents searched during a patent search may include granted Indian, U.S. and foreign patents, published patent applications, and non-patent literature, such as the Web, product literature, and scientific journals and databases.

## Patent Search & Analysis Report (PSAR)

### Objective of PSAR

 An inventor (like you) can make sure that your invention is unique before you spend time and money to work upon some IDP/UDP/Dissertation topics (this would be a Novelty search).

## Patent Drafting Exercise (PDE)

### Objectives of Patent Drafting Exercise (PDE)

- To train all students about provisional patent filing procedure in India
- To make all students familiar with Patent filing forms (Form- 1,2 & 3)
- To make students aware about the various requirements/data to be provided for filling of such forms.
- To teach students about various patent filing forms, fees and time limit associated with various operations associated in patent filing procedure in India.

This exercise is applicable to all BE (Sem. VIII) students.

This exercise is to be done by team of students doing project together (One PDE for one team doing project).

### Design Engineering – Canvas activity

- Organization of workshops for different design canvases
- All the student-teams are required to participate in the workshops, involving the whole of the class and prepare the necessary documents.
- Students' teams need to summarize AEIOU framework activity for observation part in Empathy Summary.
- 1. AEIOU Summary
- 2. Empathy Summary
- 3. Ideation
- 4. Product Development
- 5. Business model canvas

## Project Implementation & Report preparation

- Implementation stage will be defined by the department.
- activity schedule will be provided by the IDP/UDP committee.
- Report format also provided by the IDP/UDP committee.

## Plagiarism Search Report

- Anti-plagiarism check certificate for the final year project report
- All the student teams have to check their project report for plagiarism, which indicates percentage similarity of the languages used during drafting project report, using a good plagiarism-checking/search software package.
- All student teams have to get plagiarism search certificate using any available free plagiarisms search tools/service/software.

### **GTU PMMS Portal**

- Project Mentoring and Monitoring System (PMMS)
- On the same platform, interactive search facility is now being provided so that you can search the bibliography of the project reports of the last two years from all GTU affiliated colleges. This will be useful to students for finding out the trends of projects been already carried out and the scope of the next level innovative projects.

### **GTU PMMS Portal**

### Objectives of the PMMS:

- to develop a system for helping the students to get appropriate help and mentoring and
- to help them work more systematically on their project.
- to help the students to remain in active contact with their team members, their Faculty Guide and industrymentors (if any), HOD, principal as well as by university on a real time basis The students in the team can update about their progress in project and guide can comment on their status, progress and problems. This will increase collaboration and co-creation while improving novelty of their work.

### **GTU PMMS Portal**

#### **PMMS** Task:

- Student registration
- Team formation
- Periodic Progress Report (PPR)
- Patent Search & Analysis Report (PSAR) generation activity
- Design Engineering Canvas activity
- Final project report upload
- Uploading the plagiarism search report
- Completion Certificate generation

PMMS TASKS SCHEDULE FOR SEMESTER 7, ACADEMIC YEAR(2017-18)		
Sr. No		
. Tasks	Zone 1 & 2	Zone 3, 4 & 5
Student Registration and Team		
1 Formation	08-06-2017 to 22-06-2017	
First Daviddia Davassa Davast		
First- Periodic Progress Report (PPR)	23-06-2017 to 25-06-2017	26-06-2017 to 29-06-2017
Second - Periodic Progress	20.05.2017 +- 02.07.2017	04.07.20174-00.07.2017
3 Report (PPR)	30-06-2017 to 03-07-2017	04-07-2017 to 09-07-2017
Third - Periodic Progress Report	t	
4 (PPR)	10-07-2017 to 14-07-2017	15-07-2017 to 19-07-2017
Fourth - Periodic Progress Repo	rt	
5 (PPR)	20-07-2017 to 24-07-2017	25-07-2017 to 28-07-2017
c Incan	20.07.2017.100.00.2017	00.00.00171-17.00.0017
6 PSAR	29-07-2017 to 08-08-2017	09-08-2017 to 17-08-2017
7 Design Engineering Canvas	18-08-2017 to 23-08-2017	24-08-2017 to 30-08-2017
8 Project report	31-08-2017 to 04-09-2017	05-09-2017 to 08-09-2017
9 Plagiarism search report	09-09-2017 to 13-09-2017	14-09-2017 to 18-09-2017
Completion Certificate		
10 generation and Feedback Form	19-09-2017 to 21-09-2017	22-09-2017 to 25-09-2017

### **IDP/UDP Committee**

IDP/UDP committee will monitoring all this activity during the final year. And provide all the details of activity within time duration.

### Also manage following:

- Student's Group Details
- Guide allocation
- Weekly reporting status
- Evaluation process
- Panel allocation for evaluation
- Activity schedule of both semester
- Presentation schedule for both semester
- Arrange different guideline session during 7<sup>th</sup> sem and 8<sup>th</sup> sem
- PMMS activity status

Thank You.....