



# GUJARAT TECHNOLOGICAL UNIVERSITY

(Established under Gujarat Act No. 20 of 2007)

ગુજરાત ટેકનોલોજીકલ યુનિવર્સિટી

(ગુજરાત અધિનિયમ ક્રમાંક: ૨૦/૨૦૦૭ દ્વારા સ્થાપિત)

Ref: GTU/CID-ODS/DE portal/AY2019-20/285

Date: 06-01-2020

## CIRCULAR

To,

Principals/Directors/HoD/DE Coordinators/Students of BE Colleges affiliated to GTU

GTU – Centre for Industrial Design (Open Design School) has been trying to cope up with all latest trends in Design & Innovation, Entrepreneurship and Technological advancement. To achieve this, GTU has introduced Design Engineering (DE) subject which is based on Design Thinking methodology and Practical Based Learning (PBL) to acquire necessary industrial skill sets through Learning by Doing approach. GTU has equipped web portal to manage and coordinate the activities related to DE, so that all the stakeholders associated with the subject of DE would be connected and informed for all latest information about it.

GTU recommend that all affiliated degree engineering colleges of GTU should take maximum benefit of the portal and join hands in building Digital India in true sense. All students/colleges have to complete the below mentioned activities as per given schedule and follow important guidelines as per Annexure 1.

Kindly visit the Design Engineering web portal at: <http://www.de.gtu.ac.in>

For any queries related to **DE projects/portal**, please connect with us at: [designprojects@gtu.edu.in](mailto:designprojects@gtu.edu.in)

For any queries related to **DE subject and feedback**, please connect with us at: [design@gtu.edu.in](mailto:design@gtu.edu.in)

Sd/-

Registrar, GTU

To, Principals/Directors of Colleges affiliated to GTU

Copy to: (1) Centre for Industrial Design (Open Design School)

(2) GTU Innovation Council

**Winners of: ICT Enabled University Award E-India - 2009 Manthan Award – 2009**

Nr. Visat Three Roads, (Campus of Vishwakarma Government Engg. College & IIT, Gandhinagar), Sabarmati – Koba Highway, Chandkheda, Ahmedabad-382424. Gujarat, India. Tele: 079-23267500 E-mail : [registrar@gtu.ac.in](mailto:registrar@gtu.ac.in)  
URL : [www.gtu.ac.in](http://www.gtu.ac.in)

### Instructions for all BE colleges affiliated to GTU:

*(Important guidelines for students, guide, DE coordinators, HOD, Principal)*

1. Registration for Student Team, Faculty member/Guide and Design Coordinator is open for Summer 2020 (Even) semester on the DE portal at <http://www.de.gtu.ac.in>.
  - a. Students are already moved from 3<sup>rd</sup> to 4<sup>th</sup> semester and 5<sup>th</sup> to 6<sup>th</sup> semester on DE portal, so students do not need to register themselves again.
  - b. Students of **4<sup>th</sup> semester** need to take new project other than 3<sup>rd</sup> semester project, so they need to enter new project details of 4<sup>th</sup> semester. The project topic is branch specific using Reverse Engineering methodology. For more details, kindly refer 4<sup>th</sup> semester module guidelines available on DE portal under academic tab.
  - c. Students of **6<sup>th</sup> semester** can continue their 5<sup>th</sup> semester project, so do not need to enter details again. But those who are taking new project (Only if 5<sup>th</sup> semester project is completed and allowed by their HOD/Guide) in 6<sup>th</sup> semester, need to enter new project details. For more details, kindly refer 6<sup>th</sup> semester module guidelines available on DE portal under academic tab.
  - d. With new project, you may form newer team and there is no limitation on number of team members allowed, but guide needs to ensure involvement of each team member and equal amount of work allocation in the project. However, in one team 4-5 team members are recommended.
2. Each College also needs to assign one Design Coordinator (one per college, not branch wise) who must be trained at the FDP organized by GTU, for managing and coordinating the activities related to DE. Design Coordinator also need to register on DE portal. Design Coordinator will be the only point of contact with GTU Design Team for any queries or suggestions. He/she will be responsible for the student's progress for Design Engineering projects as per timeline/schedule.
3. Faculty members who will guide the Design Engineering projects also need to register on DE portal. (If you already registered in previous semester as guide, then do not register again). **For taking DE subject as well as guiding DE projects, faculty member must be trained at the FDP organized by GTU.**
4. Only the Faculty Members who have trained in the FDPs in Design Engineering at GTU will be considered for appointment as external examiner of this course. The internal examiner of the subject, during the final examination, can be a Faculty Member, who has participated in an FDP in Design Engineering at GTU or at the College.
5. DE -1A (3<sup>rd</sup> sem) and DE – 1B (4<sup>th</sup> sem) will be evaluated through **Internal Viva exam at college level** and DE -2A (5<sup>th</sup> sem) and DE – 2B (6<sup>th</sup> sem) will be evaluated through **External Viva exam through university appointed external examiner** at the end of semester.
6. GTU – Centre for Industrial Design (Open Design School) has designed total five (5) level of Design Engineering FDP training and is organizing various level FDP during the semester. So it is recommended to Principal/Director/HOD to send their faculty members in various level FDPs to refine and update their learning. It is advisable that faculty

members may attend same level multiple times for further refinement in their learning. This would help us to create core team of Design Engineering at each zone to strengthen our initiative.

7. For every group of 30 students, in every branch, please see that at least one Faculty Member is trained in the FDPs at GTU. The workload of the faculty member teaching Design Engineering must be included in the timetable along with his/her other workload.
8. GTU has introduced Continuous (Monthly) Assessment Card and it is compulsory for all students and guide to complete this activity as per schedule given below.
9. Since 2014, we are having mix-matched data of trained faculty members in DE as some have left or changed the institute, so this time we are updating our database of trained faculty members through portal. So it is requested to all trained faculty members to register their details on portal by uploading their training certificate (Scan/photo copy), then only we will consider them as external examiner. **If you will change/leave the college, then please update/delete your information on portal.**
10. Design engineering teaching hours must be included in the existing time table of every college.
11. Guidelines, circulars, latest news related to DE are and will be available on DE portal.
12. Study material, canvases, Continuous (Monthly) Assessment Card and other formats are also available on DE portal for the subject. We timely update the study material and formats as per the requirements and new developments, so all stakeholders are advised to visit the portal frequently for latest information and update yourself.
13. To improve and strengthen the subject, if anyone finds Design Thinking (DT) reference material, DT tools & techniques, blogs, case studies, news etc. related to DE or have any feedbacks, please send to us on [design@gtu.edu.in](mailto:design@gtu.edu.in) and we will update it on portal for everyone to use.
14. Colleges need to send us the reports of events, case studies, achievements in relation with DE to be uploaded on DE portal.
15. Every college needs to strictly adhere to below schedule for DE related activities.

### **For 4<sup>th</sup> Semester:**

<b>Task</b>	<b>Activity related to DE for AY 2019 - 20 (Summer 2020/Even Semester)</b>	<b>Timeline</b>
1	Registration for Team/Guide/DE Coordinator	Till 25 <sup>th</sup> January, 2020
2	Problem Definition/Project title	Till 30 <sup>th</sup> January, 2020
	3.1 Domain selection	
	3.2 Reverse Engineering	
	3.3 Observation	
	3.4 Empathy Canvas – Mind Mapping	
	3.5 Prior Art Search (PAS)	
<b>3</b>	<b>Monthly Assessment - I</b>	<b>Till 30<sup>th</sup> January, 2020</b>
4	Ideation (Canvas, PAS)	Till 20 <sup>th</sup> February, 2020
5	Product Development Canvas (PDC) & User Feedback	Till 10 <sup>th</sup> March, 2020
	5.1 Learning Needs Matrix (LNM)	

<b>6</b>	<b>Monthly Assessment - II</b>	<b>Till 10<sup>th</sup> March, 2020</b>
7	Rough Prototyping & Iteration	Till 30 <sup>th</sup> March, 2020
<b>8</b>	<b>Monthly Assessment - III</b>	<b>Till 30<sup>th</sup> March, 2020</b>
9	Report Submission, Plagiarism check and Generation of project certificate	Till 05 <sup>th</sup> April, 2020

### For 6<sup>th</sup> Semester:

<b>Task</b>	<b>Activity related to DE for AY 2019 - 20 (Summer 2020/Even Semester)</b>	<b>Timeline</b>
1	Team Registration (If new project)	Till 25 <sup>th</sup> January, 2020
2	Problem Definition/Project title (If new project)	Till 30 <sup>th</sup> January, 2020
	3.1 Domain selection	
	3.2 Observation	
	3.3 Empathy Canvas – Mind Mapping	
	3.4 Prior Art Search (PAS)	
<b>3</b>	<b>Monthly Assessment - I</b>	<b>Till 30<sup>th</sup> January, 2020</b>
4	Ideation (Canvas, PAS)	Till 20 <sup>th</sup> February, 2020
5	Product Development Canvas (PDC) & User Feedback	Till 10 <sup>th</sup> March, 2020
	5.1 Learning Needs Matrix (LNM) & Detail design	
	5.2 Design Calculation	
	5.3 Detail Design (Various considerations/aspects as mentioned in course guidelines of 6th semester)	
<b>6</b>	<b>Monthly Assessment - II</b>	<b>Till 10<sup>th</sup> March, 2020</b>
7	Working model: Prototyping, Iteration, Testing	Till 30 <sup>th</sup> March, 2020
<b>8</b>	<b>Monthly Assessment - III</b>	<b>Till 30<sup>th</sup> March, 2020</b>
9	Report Submission, Plagiarism check and Generation of project certificate	Till 05 <sup>th</sup> April, 2020
<p><b>Note:</b> Students who are continuing their 5<sup>th</sup> semester project to 6<sup>th</sup> semester, they will directly start working from Ideation or Product Development phase (where they left their work in 5<sup>th</sup> sem) till working model as per above schedule and guidelines of DE-2B.</p>		

\*\*\*End of Document\*\*\*