



Ref.: GTU/DIC Courses/2019-20/14149

Date: 27/12/2019

# **Gujarat Technological University**

Circular

# Design Innovation Centre (A MHRD Funded Project)

Launches various certificate courses in

"Design, Innovation & Emerging Technologies: Gujarat Leads the Way" For Skill Development and Employment Opportunities

GTU in association with Innovation & Research Foundation aims at making Gujarat a Model state in Emerging Technology workforce development.

# "Join Courses for Future Jobs"

» Artificial Intelligence «

» Design Thinking «

» AR/VR «

» Digital Design Technology «

» UI/UX «

» Internet of Things (IoT) «

Important Dates for 1<sup>st</sup> Batch:

- Last date to fill application form: 15<sup>th</sup> January, 2020
- Last Date for Online Payment: 20th January, 2020
- Date for Commencement of Courses (1st Batch): 25th January, 2020

**Note:** These are rolling courses, starting every quarter, continuous batches will be commenced as per applications received.

Apply Now



GUJARAT TECHNOLOGICAL UNIVERSITY (Established under Gujarat Act No. 20 of 2007)

## Design Innovation Centre (DIC) MHRD funded Project - Hub & Spoke Model



#### About Gujarat Technological University (GTU):

Gujarat Technological University is a premier academic and research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act No. 20 of 2007. Today, GTU is an intellectual destination that draws inspired scholars to its campus, keeping GTU at the nexus of ideas that challenge and change the world. GTU is a State University with 486 affiliated colleges in its fold operating across the state of Gujarat through its FIVE zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot and Surat. The University caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. The University has about 4,00,000 students enrolled in a large number of Diploma, Under Graduate, Post Graduate programs along with the robust Doctoral program. Our education empowers individuals to challenge conventional thinking in pursuit of original ideas.

#### About Design Innovation Centre (DIC) – GTU:

GTU since its foundation in 2007, is striving to create, achieve and support the unique initiatives in design, innovation and entrepreneurship to build a holistic ecosystem by intervention of latest technologies. Considering its efforts in developing such ecosystem, MHRD has awarded the grant to GTU for establishment of a full-fledged Design Innovation Centre (DIC) to promote, nurture and advance the culture of design, innovation, creative problem solving and entrepreneurship among young minds at GTU premise as Hub and other three institutes in Rajkot, Surat and Modasa as spokes to cover entire state. DIC would support Innovators in product design and development, prototype building through full-fledged FabLab, mentorship and networking, IPR support, training and workshop, skill developments, fellowship and awards to best projects/solutions and co-working space.

#### About Innovation and Research Foundation: Course Partner

**Innovation Research Foundation (IRF)** offers meaningful perspectives to education, research and professional development. IRF pioneered the design thinking revolution in India in 2008 through programs for K12, Higher Education & Corporate programs. The foundation is led through a consortium of forward looking educationists and professionals having diverse expertise through rich experience.



The team offers specialized inputs to academia and industry in innovation thinking, design pedagogy and management skills. The Foundation engages with the universities, corporate and government agencies for programs, workshops and consulting projects of strategic and tactical involvement. IRF serves global clients based in India, China, Europe, Australia and USA.



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IRF has partnership with IIT Kanpur, One Fourth Labs IIT Madras, Red River College Canada, Lincoln University College Malaysia (through it's sister organizations (a) Explorra School of Design & Technology and (b) Futurz Xplored) for programs in AI, ML, Big Data, Data Analytics, Additive Manufacturing etc.

#### **About DIC Certificate Courses:**

India with its 65% population as youth (18-35 years) has tremendous potential to develop into the hub of expert workforce for the world. This can be fulfilled through skill development for everyone in that age bracket across the country. But, the access of various sections of population to such skill development activities limits the potential of the youth and in turn the growth of the country. An Engineer already has a technical/logical understanding and logical thinking with sound knowledge of Engineering and thus these can enhance the problem solving ability. This also leads to the designing and Design thinking process that involves both scientific and creative thinking, using visual thinking being a major focus area within these courses along with the software used as tools for creating applications. Emerging Technologies such as Artificial Intelligence (Data Science – Level 1, Machine Learning – Level 2, Deep Learning - Level 3), Augmented & Virtual Reality, UI-UX User Interface & User Experience, Digital Design & Technology, Internet of Things are becoming an absolute must for an Engineer. All organizations either want deep knowledge of these fields so as to provide employment on basis of the knowledge of these sectors OR they want engineers to have a broad understanding of these fields so as to make their product or services as well as their work more effective and efficient.

Thus these certificate courses will address these two needs,

- 1. Employment to students
- 2. Development of Employability skills (Skills required by the industry today & in future)

All Certificate courses under DIC will be conducted by various experts and mentors from academia and industry who possesses diversified vast experience in respective field of courses. Course content and assignments are thoroughly crafted looking at the needs of industry to develop skills and hands-on expertise for future needs. **GTU-DIC would support in placement after successfully completing courses.** Teaching learning pedagogy involve classroom teaching with study material, presentations, video and case studies along with practical application of learning through real world problems in form of one capstone project for all courses. So that students can be able to apply their learning in real environment with problem solving ability.

#### Design Innovation Centre (DIC), GTU



## Design Innovation Centre (DIC) MHRD funded Project - Hub & Spoke Model



### Introduction to various certificate (4-6 months) courses (Online/Offline)

**ARTIFICIAL INTELLIGENCE (AI) LEVEL 1 of 3:** AI focuses on realizing intelligent human behaviors on a computer, where the ultimate goal is to make a computer that can learn, plan, and solve problems autonomously. The main purpose of this course is to provide the fundamental knowledge (know-how) to the participants so that they can understand the concept of AI and further develop their Skills in it (do-how) and put their skills into practice (show-how). **Total 3 level by online mode will be conducted by IIT Madras Professors.** 

**DESIGN THINKING:** Design thinking course is recommended for all students at GTU, since this is a horizontal skill development program. It will help students develop the 21<sup>st</sup> Century skills proposed by the World Economic Forum, thus, enhancing their employability. The course has gained prominence, after the recruiting companies have started to ask for know-how of design thinking. The proposed program will also directly help aspiring start-ups and students keen on self-employment.

**AGUMENTED REALITY (AR)** - **VIRTUAL REALITY (VR)**: The course aims to expose learners to the basic of AR/VR technology and devices, understanding of various elements/components used in AR/VR Hardware and Software and industrial application of AR/VR technology with hands on experience through more informative and practical exploration.

**DIGITAL DESIGN TECHNOLOGY:** To Enable Engineers get on to developing Concepts and actualize their Ideas by converting them to a visual/tangible output using printing and publication media i.e. 2D & 3D still images/graphics. This will also enable them to develop presentation skills for various digital platforms. The program aim at providing employment to students in the domain of Digital Design & Media Technology.

**USER INTERFACE (UI) AND USER EXPEREINCE (UX):** The aspects of user experience (UX) and user interface (UI) design are often intertwined in a way that Design is human centric, another aspect to UX is problem-solving, "It is about understanding the needs and problems, and using design to properly build solutions in that space. The program will help students understand first User Experience for range of different industries and scenarios, and, then how to apply that to the last mile i.e. User Interface i.e. digital content for different screens.

**INTERNET OF THINGS:** The Internet of Things, commonly referred to as IoT, is the network of physical objects, devices, vehicles, buildings, and other items that's been integrated into the technology of modern electronics, software, sensors, and other "things" with network connectivity that enables them to collect and exchange data. Once collected, this data becomes a powerful resource, which companies and technologies are tapping into, in revolutionary ways.





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## **DIC Course details:**

Online	Artificial Intelligence - Level 1 of 3 (Total 3 levels)
• Fees: <i>Rs. 1,180/le</i>	<b>vel</b> - Massive Discount on course fees for limited time
Duration: 4 Month	hs by IIT Madras Faculty
Offline	Internet of Thing (IoT)
• Fees: <i>Rs. 11,000*</i>	(EMI 1 - Rs. 4000, EMI 2 - Rs. 4000, EMI 3 - Rs. 3000)*
Duration: 4 Month	าร
Offline	Design Thinking to foster Creativity and Innovation leading to Entrepreneurship
• Fees: <i>Rs. 15,000*</i>	(EMI 1 - Rs. 5000, EMI 2 - Rs. 5000, EMI 3 - Rs. 5000)*
Duration: 4 Month	าร
Offline	Augmented Reality (AR) & Virtual Reality (VR)
• Fees: <b><i>Rs.</i> 15,000</b> *	(EMI 1 - Rs. 5000, EMI 2 - Rs. 5000, EMI 3 - Rs. 5000)*
Duration: 4 Month	าร
Offline	UI/UX Design
• Fees: <i>Rs. 15,000*</i>	(EMI 1 - Rs. 5000, EMI 2 - Rs. 5000, EMI 3 - Rs. 5000)*
Duration: 4 Month	าร
Offline	UI/UX Design (Assured Employment Program)
• Fees: <i>Rs. 27,500*</i>	(EMI 1 - Rs. 9500, EMI 2 - Rs. 9000, EMI 3 - Rs. 9000)*
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• Duration: 6 Ivionti	
Offline	Digital Design Technology (Assured Employment Program)
Offline	
	Program)   (EMI 1 - Rs. 9500, EMI 2 - Rs. 9000, EMI 3 - Rs. 9000)*





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#### Eligibility: (Limited 20 seats per course in batch)

Since all the programs are horizontal skill programs i.e. necessary for all engineering students, thus, engineering students from any stream and any year who are keen for employment opportunities and wish to gain employability skills that will enhance their prospects in employment can apply.

Moreover, anyone (Students, Faculty members, Researchers, Industry Personnel, Innovators/Start-ups or any aspirants) with the zeal to learn and acquire skills and practical learning in areas of Design, Innovation and Emerging Technologies.

#### **Procedure for DIC Course Application:**

1. Fill in the online Application Form: (*To join more than one course, kindly fill the form course wise*)

### Apply Now (Application Form)

- 2. Make the online payment for the respective course fees through online mode. After submission of this application form, we will send you payment link and step-by-step payment guideline on your registered email.
  - Payment link: <u>https://www.onlinesbi.com/sbicollect/icollecthome.htm</u>
- 3. The participants will be enrolled for the course/s after DIC will receive successful payment towards fees and provided unique registration number for future reference.

For more details on the DIC courses, please visit: <u>http://dic.gtu.ac.in/</u>

### For any query, kindly reach out to us at:

#### Design Innovation Centre (DIC), GTU

Address: Shed -2, Old IIT Shed, GTU Chandkheda Campus, Nr. Visat Three Road, Chandkheda, Ahmedabad – 382424, Gujarat, India.

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Email: dic@gtu.ac.in

-/Sd Registrar