

Job Details for Engineer – Product Design & Prototyping			
Job Location:	Pune	Job Code:	VC/SI/02
About the Company	The Venture Center is a National award winning technology business incubator and leading inventive enterprises incubator that focuses on building science-based deep tech startups and also creating an innovation ecosystem to support innovators who use science and technology to deliver products and services with considerable socio-economic impact for society. The Venture Center is the trademark of Entrepreneurship Development Center, a not-for-profit company, based in Pune. For more information: <u>http://www.venturecenter.co.in</u> Protoshop is a prototyping facility at Venture Center providing services to the inventors and entrepreneurs to design and build their prototypes. <u>http://www.protoshop.in/</u>		

Summary:

Venture Center is looking for an engineer having strong interest and skills in Design and development of POC/Prototype/Product.

Conceptualizing product ideas using CAD software to design and develop prototypes, fabricating prototypes for testing, fine tuning designs until they are ready for production/manufacturing.

The activities comprise:

- 3D Modeling/2D drafting for POC/Prototype/ Product
- 1-D Simulation using Matlab and Simulink
- Perform design reviews
- Transferring 2D/3D designs to the part by identifying tools, determining speeds, feed and writing the part program for CNC (2D + 3D Programming using SolidWorks CAM)
- CNC Machine handling from set up to operation, producing quality parts and producing tools specific to engineering drawing and client standards.
- Ability to translate concept/idea into
 - i. Mechanical documents and engineering drawings.
 - ii. Engineering drawings and requirements into dimensions for production.
 - iii. Requirements to programs mills and lathes by
 - Entering instructions, including zero and reference points
 - Setting tool registers, offsets, compensation, and conditional switches
 - Calculating requirements, including basic math, geometry, and trigonometry
 - Proving part programs.
- Planning machining by studying work orders, blueprints, engineering plans, materials, specifications, drawings, reference planes, locations of surfaces, and machining parameters. Interpreting geometric



dimensions and tolerances, cutting tool selection and assembly.

- Working with CAD (computer-aided design) and CAM (computer-aided manufacturing) programs
- Identifying and Communicate logistics issues that arise in the process of creating a part.
- In depth knowledge of the latest equipment and techniques emerging in the industry.
- Accomplishes organization goals by accepting ownership for accomplishing new and different requests; exploring opportunities to add value to job accomplishments.

Experience in plastic injection moulding machine will be considered as advantage. This involves setting up and operating injection-moulding machines to cast products.

Skills required:

2D and 3D Modeling (Catia V5/Solidworks/NX10)

Skills with added advantage:

CNC Programming (2D/3D Programming for FANUC Controller and Haas Controller), 3D Printing, Matlab, Simulink, C Language, Java

Candidate Profile

- BE/BTech Mechanical / Mechatronics Engineering
- Minimum of 2 years' experience
- Skills required:2D and 3D Modeling (Catia V5/Solidworks/NX10),
- Skills with added advantage: CNC Programming (2D/3D Programming for FANUC Controller and Haas Controller), 3D Printing, Matlab, Simulink, C Language, Java
- Demonstrate integrity, dependability, responsibility, accountability, self-awareness, work ethic, and empathy
- Passion for entrepreneurial communities

Employment Status

Full Time

General requirements and expectations from Venture Center employees:

- Venture Center is a non-profit organization with aims to benefit society by promoting entrepreneurs and start-ups. Thus, Venture Center seeks employees and consultants who have a strong interest and passion in seeing technology innovators, entrepreneurs and start-ups succeed, and have a strong "service" ethos.
- A strong feature of Venture Center jobs is the rich learning environment and opportunity provided to employees to experiment, take initiative and be creative. The work of most employees has visible impact which can be satisfying. All employees benefit from access to high quality facilities and work environments. Compensation packages can be flexible but are often conservative due to Venture Center's non-profit status.



• General requirements include: a) strong ethical standards and work ethics, b) comfort with computers, computer applications and internet, c) strong communication skills – spoken and written.