GM UNIVERSITY

P.B ROAD, DAVANAGERE - 577006

Innovating Minds

Igniting
Innovation

Inspiring
Transformation

IDEA LAB

Empowering Ideas Into Reality

40+ Experts

5 Division

60+ Clients

1004 Sq.M Work Area

Contents

GM University

Founders

G Mallikarjunappa
Founder Chairman,
Srishyla Educational Trust

G M Prasanna Kumar
Chairman

G M Lingaraju
Secretary

G S Anith Kumar
Treasurer

GM University

Officers

G M Lingaraju
Chancellor

Dr. S R Shankapal
Vice Chancellor

Dr. H D Maheshappa
Pro Vice Chancellor

Dr. B S Sunil Kumar
Registrar

GM University Organisation

Academics

- Faculty of Engineering and Technology (FET)
- Faculty of Computing and IT (FCIT)
- Faculty of Basic and Applied Sciences (FBAS)
- Faculty of Commerce and Management (FCM)
- Faculty of Legal Studies and Public Policy (FLSPP)
- Faculty of Humanities and Social Sciences (FHSS)
- **Faculty of Health and Allied Sciences (FHAS)**
- Faculty of Tourism and Hospitality (FTH)
- Faculty of Architecture, Art and Design (FAAD)
- Faculty of Agri Technology and Agri Sciences (FATS)
- Faculty of Education (FED)
- GM School of Advanced Studies (GMSAS)
- GM School of Business (GMBS)

Research

- PhD Programs
- Centres of Excellence
- Sponsored/Grant Research
- Research Publications
- Conferences
- Publication of In-House-Research Bulletin
- Organising Prestigious Lectures
- IPR and Patents
- Research Seed Money Funding

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Competency, Skill & Vocational Training

- School of Vocational Training
- School of Digital Technical Competency Development
- Centre for Online Education-Certification Programs

IDEA Lab

- GM Techno Centre-Centre for Technical Consultancy
- Centre for Innovation & Design Thinking
- Product Design Centre
- Centre for Technology Product Incubation
- Centre for Business Incubation & Entrepreneurship
- Centre for Collaboration & Partnership Development

Empowering Ideas Into Reality

About the IDEA Lab at GM University

The IDEA Lab at GM University is an innovative space designed to inspire creativity, promote collaboration, and drive the development of ground-breaking IDEAs. It serves as a dynamic hub where students, faculty, and industry experts can come together to brainstorm, experiment, and bring novel concepts to life. With a focus on fostering an environment conducive to creative exploration, the IDEA Lab equips participants with the tools and guidance needed to transform IDEAs into tangible solutions.

Key Features of the IDEA Lab:

Collaborative Environment
The IDEA Lab encourages team-based work, bringing together individuals with diverse perspectives for rich, cross-disciplinary interactions and creative synergy.

Innovation Resources
Equipped with state-of-the-art tools and technologies, such as 3D printers, software suites, and design kits, the lab provides essential resources for prototyping, experimentation, and visualizing new IDEAs.

Creative Freedom
The lab is a judgment-free space where participants can explore bold, unconventional IDEAs without the fear of failure, allowing creativity to flourish.

Interdisciplinary Focus
By integrating people from various fields, the IDEA Lab enables a comprehensive approach to complex problem-solving, broadening the range of insights and solutions.

Access to Mentorship
Participants benefit from the guidance of mentors and industry experts who offer valuable insights, helping to shape and advance IDEAs toward viable outcomes.

Problem-Solving Focus
With a commitment to addressing real-world challenges, the IDEA Lab focuses on innovative solutions to pressing issues in areas like sustainability, healthcare, education, and technology.

The IDEA Lab at GM University is more than just a workspace—it's a Launchpad for future-ready solutions and a catalyst for innovation in education, industry, and society.

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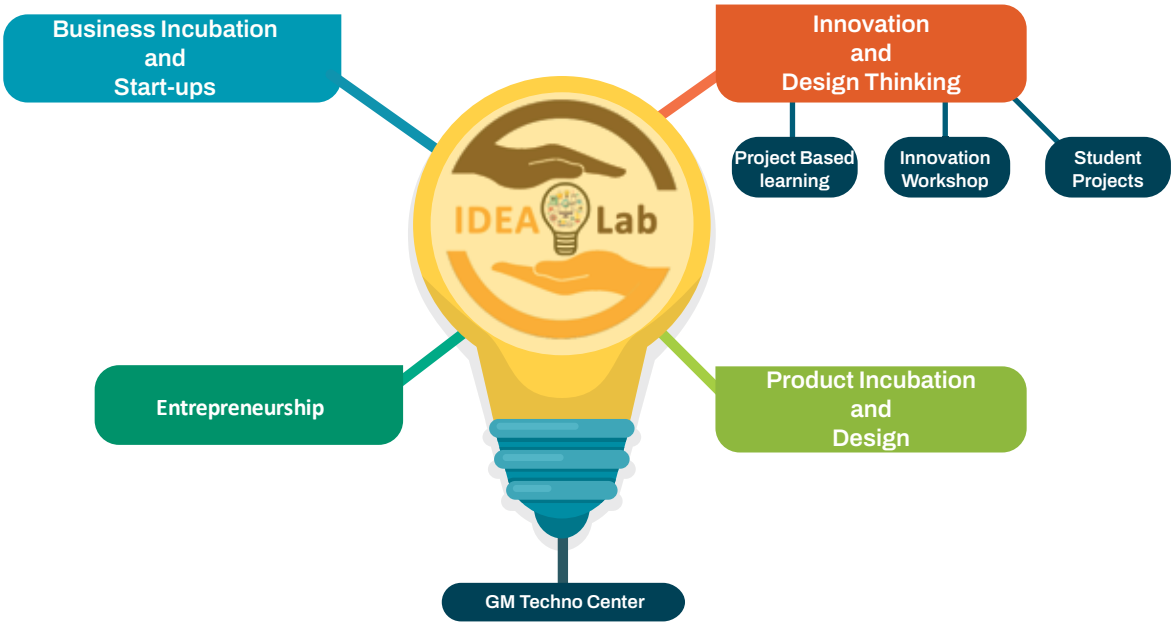
IDEA Lab



IDEA Lab at GMU: Fostering Innovation and Entrepreneurship

The IDEA Lab at GMU serves as a dynamic hub for nurturing creativity, innovation, and entrepreneurial spirit among students and faculty. It is built on four key pillars:

- Innovation and Design Thinking
- Product Incubation and Design
- Business Incubation and Start-ups
- Enterpreneurship
- GM Techno Centre

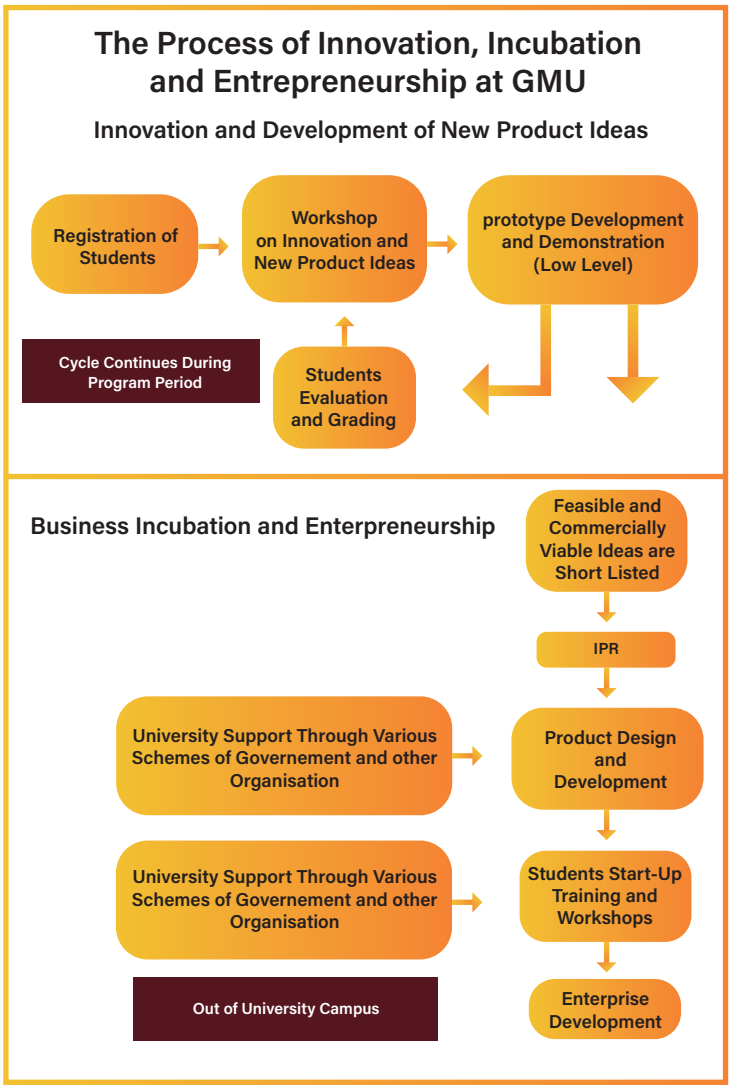
The **Centre for Innovation and Design Thinking** aims to spark creativity by organizing workshops and training sessions that inspire participants to generate innovative product concepts.

The Centre for Product Incubation and Design focuses on transforming these ideas into tangible solutions by providing cutting-edge software, hardware facilities, and expert guidance on product development

The Business Incubation and Start-ups mentors students and faculty in launching successful startups equipping them with the skills and support needed to thrive in competitive markets and assist successful start-ups to establish Enterprises.

The GM Techno Centre extends GMU's expertise beyond the campus by offering professional technical consultancy services to external clients.

The IDEA Lab stands as a testament to GMU's commitment to fostering a culture of innovation, bridging academia with industry, and empowering the next generation of creators and entrepreneurs.



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Innovation and Design Thinking

Product Concept Generation Applying Design Thinking at GMU

At GMU, an annual week-long training program introduces students to product concept generation using Design Thinking principles. This creative, iterative process helps students craft innovative solutions to real-world challenges.

A Week-Long Design Thinking Workshop: Empowering Students to Innovate

The Design Thinking workshop at GMU immerses students in innovation, problem-solving, and product development through hands-on learning. It guides them through identifying problems, generating solutions, and refining ideas into prototypes.

Workshop Breakdown:

1. **Identifying User Needs:** The workshop begins with training on empathy, crucial for understanding user needs. Students engage in user research, such as interviews and surveys, to gain insights into real challenges and unmet needs. Techniques like empathy mapping help them connect with users' experiences, ensuring that solutions are user-centered.

2. **Defining the Problem:** After identifying user needs, students learn to define the core problem clearly. They transform broad issues into focused problem statements, which guide the design process. For example, a problem statement might be, "How might we design an affordable, user-friendly tool to improve time management for university students?" This phase ensures the design efforts address the right challenge.

3. **Generating Design Concepts:** In brainstorming sessions, students think creatively and generate multiple ideas using techniques like mind mapping and sketching. The focus is on quantity over quality at this stage to encourage a wide range of diverse solutions, fostering creativity and new approaches.

4. **Choosing the Best Concept:** After generating ideas, students evaluate and select the best concept. Using tools like voting, SWOT analysis, and group discussions, they assess each idea's feasibility and potential impact. The goal is to choose a concept that is innovative, practical, and capable of addressing the user needs effectively.

5. **Developing the Prototype:** Students move on to creating low-fidelity prototypes. These could include paper models or digital mock-ups. The emphasis is on quickly bringing ideas to life, enabling students to test assumptions and refine their solutions through iteration, focusing on functionality rather than perfection.

6. **Demonstrating the Prototype:** In the final phase, students present their prototypes to peers, faculty, and potential users. They receive feedback, which helps improve their design. This feedback loop is essential for refining the prototype and helps students build confidence in their ideas, improving their communication and advocacy skills.

   This workshop equips students with the skills to innovate and solve problems, preparing them for real-world challenges.

Product Incubation and Design

Product Incubation and Design at GMU: From Concept to Working Prototype

The Product Incubation and Design Centre at GMU plays a critical role in transforming innovative product concepts into working prototypes. This process provides students with the resources, tools, and training necessary to bring their ideas to life. After selecting product concepts through the concept generation process, students actively engage in every stage of design and prototype creation.

Steps Involved in Product Incubation and Design:

1. **Concept Selection and Evaluation:** After generating and shortlisting product concepts, the next step is evaluating their feasibility. This involves assessing factors like usability, functionality, ergonomics, aesthetics, and commercial viability. The most promising ideas are selected for further development into working prototypes.

2. **Providing Tools and Facilities:** Students are provided with advanced tools and facilities to design, model, and test their prototypes:

    - **Modeling Tools:** CAD software enables students to create detailed digital models of their concepts, visualizing designs and making adjustments.
    - **Analysis Tools:** Simulation software helps evaluate the performance of designs, including stress, heat, and fluid dynamics analysis.
    - **3D Printing Facility:** This allows for rapid prototyping, creating physical models for visualization before advanced stages of development.
    - **PCB Making Facility:** For electronic products, students can design and prototype custom circuits.
    - **Fabrication Facilities:** Mechanical, electrical, and electronic fabrication shops provide hands-on experience for building components.
    - **Testing Facilities:** Prototypes undergo testing to ensure they meet the required performance standards, such as electrical testing, mechanical durability, and functionality.

3. **Product Design Training:** Alongside the tools and facilities, students receive comprehensive training in product design and development. This includes understanding the design process, incorporating user feedback, and aligning the product features with market needs. They also learn the importance of iteration, continually refining prototypes based on testing and feedback.

4. **Developing the Working Prototype:** With faculty guidance, students use the tools and knowledge they've gained to create a working prototype. This fully functional version demonstrates key features and performance. The process involves multiple rounds of iteration and testing to refine the design, ensuring improved functionality, usability, and quality.

5. **Demonstration and Validation:** Once completed, the prototype is demonstrated under real-world conditions. Feedback from faculty, industry experts, and potential users helps further refine the product, ensuring it meets functionality and user requirements. This validation is essential for identifying any necessary improvements before commercialization.

6. **End Product:** The final outcome is a demonstrable, working prototype ready for evaluation or commercialization. This process equips students with hands-on experience in product design and prepares them for challenges in engineering, entrepreneurship, and innovation.

Business Incubation and Start-ups

Taking the Product to Market: The Role of Business Incubation in Start-Up Creation
Once a working prototype is developed at GMU's Product Incubation and Design Centre, the next step is transitioning it to the market. This process, from prototype to commercialization, requires strategic planning, business expertise, and effective mentorship. The Business Incubation Centre plays a vital role in helping students and faculty turn their innovations into successful start-ups.

Key Steps in Bringing a Product to Market:

1. **Market Research and Identifying the Target Audience:** The first step is market analysis, where students assess customer needs, industry trends, and competitors. The focus is on identifying the target audience whether businesses, consumers, or specific sectors—and tailoring the product to meet their needs.

2. **Developing a Business Model:** After understanding the market, the next step is developing a business model. This outlines how the product will reach customers, the revenue generation method, and the cost structure. Options include direct sales, subscriptions, or licensing, depending on the product and target market.

3. **Building a Business Plan:** A comprehensive business plan is essential to turning the product into a business. It should include:
   - Executive Summary: An overview of the product and company vision.
   - Market Re search: Insights into customer needs and competition.
   - Marketing and Sales Strategy: A plan to promote and sell the product.
   - Financial Projections: Estimated costs, income, and funding needs.
   - Team Structure: Identifying roles and key skills.

4. **Mentorship and Guidance on Business Incubation:** Mentorship is crucial in transforming the product into a viable business. The Business Incubation Centre provides support in areas like:
   - Business Strategy: Mentors guide refining the business model and structuring the start-up.
   - Funding and Investment: Helping identify funding sources and creating investor pitches.
   - Legal Support: Assistance with company registration and intellectual property protection.
   - Marketing and Sales: Guidance on branding, digital marketing, and customer acquisition.

5. **Establishing the Start-up:** With the business plan and mentorship in place, students can launch the start-up, including:
   - Legal Formalities: Registering the company and securing licenses.
   - Team Building: Recruiting the right team.
   - Branding and Marketing: Developing the brand identity and promotional materials.
   - Production and Distribution: Setting up production and delivery systems.

6. **Product Launch and Scaling:** The launch can include online events, social media campaigns, and industry showcases. After the product gains traction, the focus shifts to scaling, increasing production, expanding markets, and optimizing operations.

7. **Continuous Support:** Even after launch, the Business Incubation Centre continues to offer guidance, helping the start-up overcome challenges and ensuring long-term success.
   Through mentorship and structured support, GMU's Business Incubation Centre helps students and faculty bring their innovative products to market, fostering entrepreneurship and growth.

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Entrepreneurship

Converting a start-up into a successful business enterprise is a transformative process that requires strategic planning, scaling operations, and establishing long-term sustainability. The journey can be outlined in the following stages:

1. **Validation and Refinement**
   Before scaling up, it is crucial to ensure that the start-up's product or service meets market demands effectively.
   - **Customer Feedback:** Continuously gather and implement feedback from early adopters to refine the product.
   - **Market Fit:** Validate that the offering addresses a real problem for a clearly defined customer segment.

2. **Building a Scalable Model**
   Developing a business model that can grow while maintaining quality and efficiency is vital.
   - **Operational Systems:** Establish processes for production, delivery, and customer support.
   - **Automation:** Integrate technologies to streamline operations and reduce costs.
   - **Team Building:** Hire skilled professionals to take on specialized roles, strengthening the team structure.

3. **Financial Planning and Growth**
   Financial stability and strategic investment are key to transitioning into a full-fledged enterprise.
   - **Revenue Streams:** Diversify and optimize income sources to ensure steady cash flow.
   - **Investment and Funding:** Secure additional funding from venture capitalists, angel investors, or loans to expand operations.
   - **Cost Management:** Implement efficient budgeting practices to control expenses.

4. **Market Expansion**
   Scale the business by expanding its reach to new markets and customer segments.
   - **Geographical Expansion:** Explore regional, national, or international markets.
   - **Partnerships and Collaborations:** Form alliances with other companies to increase market presence and share resources.
   - **Brand Building:** Invest in marketing and branding to create a recognizable identity and attract customers.

5. **Adopting Robust Governance**
   To operate as a business enterprise, establish strong governance practices.
   - **Leadership Structure:** Define roles for executives and board members to oversee decision-making.
   - **Legal Compliance:** Ensure adherence to regulations, tax policies, and intellectual property rights.
   - **Performance Metrics:** Develop KPIs (Key Performance Indicators) to track growth and operational efficiency.

6. **Continuous Innovation**
   Sustainability in business requires adapting to changing markets and customer needs.
   - **R&D Investment:** Allocate resources to innovate and diversify product offerings.
   - **Customer Engagement:** Maintain strong relationships with customers through feedback and support.
   - **Agility:** Be prepared to pivot strategies based on market dynamics.

GM Techno Centre - Technical Consultancy

Bridging Academia and Industry for Technological Advancement

The Centre for Technical Consultancy and Product Development is committed to connecting academia with industry to address real-world challenges. Leveraging academic expertise, we offer innovative solutions and advanced research that significantly impact industries and communities. Our team of researchers, engineers, and experts creates customized, scientifically sound, and practical solutions.

Consultancy Divisions include:

- Engineering Design, Analysis, and Testing
- Digital Transformation & AI Solutions
- Civil Engineering Solutions
- Integrated Electronics & Communication Consultancy
- BioTech and Pharmaceutical Consultancy
- Business & Management Solutions

Message from Division Heads

The IDEA Lab at GM University is a hub of creativity, innovation, and entrepreneurship, bringing together students, faculty, and industry experts under one roof to address real-world challenges.

Innovation and Design Thinking:

"We nurture creative problem-solving and innovative thinking, enabling students to develop ground breaking solutions to complex problems."

Head, Innovation and Design Thinking

Dr.Girish Bolakatti

Mrs.Spoorthi B

Product Incubation & Design:

"From concept to creation, we provide the resources and expertise to transform IDEAs into functional prototypes and advanced product designs."

Head, Product Incubation & Design

Dr.Srinivasa C V

Mr.Raviteja Balekai

Business Incubation and Start-Ups:

"Our division is committed to guiding and supporting entrepreneurial journeys, transforming innovative IDEAs into successful business ventures."

Head, Business Incubation and Start-Ups

Mr.Prashant H R

Dr.Varun B K

Entrepreneurship:

"We empower aspiring entrepreneurs to embrace innovation, take calculated risks, and build sustainable businesses that make a difference."

Head, Entrepreneurship

Dr.Rajakumar D G

Dr.Poojitha B S

GM Techno Centre - Technical Consultancy:

"Our expert consultancy services are tailored to provide practical and cutting-edge solutions to meet industry challenges."

Head, GM Techno Centre TechnicalConsultancy

Dr.Srinivasa C V

Dr.Y B Bharatharaj Etigi

Message from Director

At GM University, we are excited to introduce the IDEA Lab a dedicated space where innovation meets collaboration. As Director of the IDEA Lab, I am honored to work under the guidance of our Vice Chancellor, Dr. S.R. Shankapal, to build a center that nurtures creativity, entrepreneurial thinking, and practical problem-solving among our students and faculty.

The IDEA Lab serves as a dynamic platform where students, faculty, and industry experts come together to explore IDEAs and transform them into impactful solutions. With specialized centers such as the GM Techno Centre for industry consultancy, the Centre for Innovation and Design Thinking, and the Centre for Product Design, the IDEA Lab is structured to drive creative exploration, hands-on prototyping, and advanced product development. We also support entrepreneurial journeys through the Centre for Technology Product Incubation and the Centre for Business Incubation, guiding start-ups from concept to commercialization. Furthermore, the Centre for Collaboration and Partnership Development strengthens our industry ties, fostering a robust link between academia and the professional world.

This initiative is about more than just developing technical skills. The IDEA Lab immerses students in real-world challenges, equipping them with the confidence and experience to excel in their careers and contribute meaningful innovations to society. By blending academic excellence with industry-driven insights, the IDEA Lab is a forward-thinking effort to shape the future leaders of tomorrow.

Dr. Srinivasa C V
Director, IDEA Lab
GM University

Message from Vice Chancellor

At GM University, we are committed to fostering a culture of innovation and entrepreneurship among our students. The establishment of the IDEA Lab is a testament to our dedication to providing students with the resources and training needed to transform their ideas into viable products and businesses. In today's rapidly evolving world, the ability to innovate and think creatively is essential for success, and we believe it is our responsibility to nurture this entrepreneurial spirit.

The IDEA Lab serves as an incubator for students, guiding them through every phase of product development from concept generation to taking the product to market. Through hands-on experiences and specialized training, students are equipped with the skills and knowledge needed to identify market gaps, create innovative solutions, and refine them into prototypes that can make a real-world impact.

Our approach integrates Design Thinking principles, which focus on empathy, problem-solving, and user-centric solutions. This methodology encourages students to think critically, collaborate across disciplines, and push the boundaries of what is possible. By leveraging state-of-the-art tools and facilities within the IDEA Lab, students are given the opportunity to transform their concepts into tangible products, learning essential skills in prototyping, testing, and product refinement along the way.

Moreover, the IDEA Lab also emphasizes the importance of taking products beyond the university, with training that helps students navigate the complexities of market entry, commercialization, and scaling. We are not just fostering future innovators we are shaping the next generation of entrepreneurs who will contribute to the economy and society.

Our commitment is to provide an ecosystem that empowers students to think big, take risks, and turn their innovative ideas into entrepreneurial ventures. As they move from concept to market, they not only develop practical skills but also learn the resilience and perseverance required to succeed in today's competitive world.

At GMU, we firmly believe that innovation is the key to creating a brighter future, and the IDEA Lab is a powerful catalyst in realizing that vision. We are excited to see our students thrive as they embark on their entrepreneurial journeys, transforming ideas into real-world solutions

Dr. S.R. Shankapal
Vice Chancellor
GM University

Why Choose IDEA Lab ?

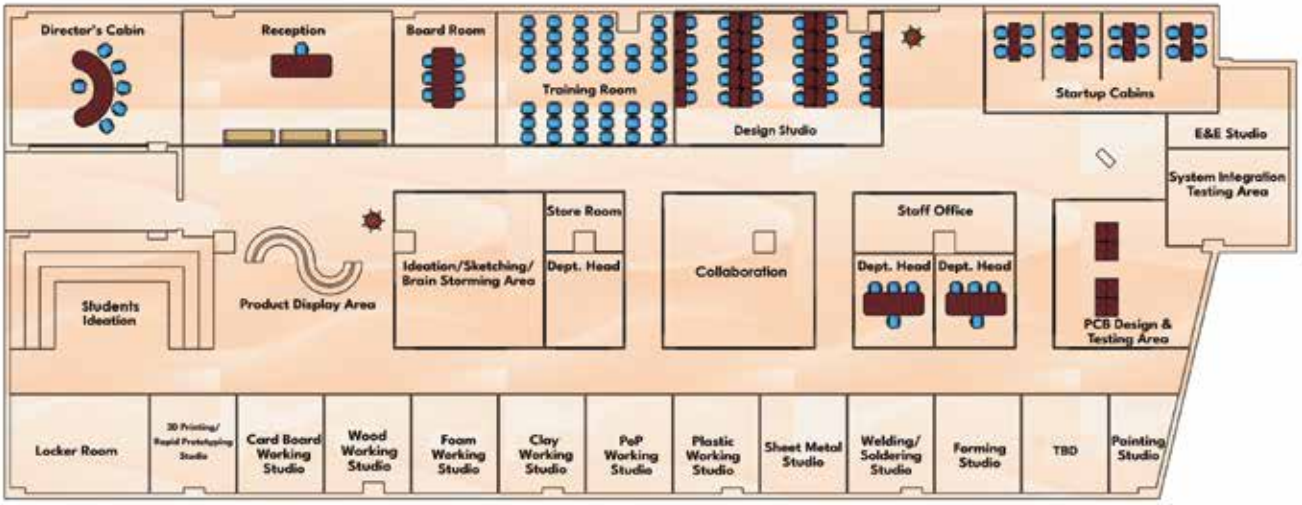
The IDEA Lab at GM University is a state-of-the-art interdisciplinary hub designed to ignite innovation and entrepreneurship. It brings together a range of specialized centers that work in harmony to empower students, faculty, and entrepreneurs:

- Innovation and Design Thinking: Fostering creativity and strategic problem-solving.
- Product Incubation and Design: Transforming concepts into market-ready products.
- Business Incubation and Start-ups: Enabling the commercialization of IDEAs and nurturing business ventures
- Entrepreneurship: Fostering innovation and empowering entrepreneurs
- GM Techno Centre: A hub for technical consultancy, bridging the gap between academia and industry.

At IDEA Lab, we offer a comprehensive ecosystem that nurtures the entire journey of turning an IDEA into a prototype. Our cutting-edge facilities, combined with expert mentorship, provide students and faculty the tools they need to develop impactful solutions for society.

The IDEA Lab is a dynamic, interactive, and free-thinking environment, where diverse individuals from various disciplines collaborate to generate ground-breaking IDEAs. By encouraging creative thinking, problem-solving, and teamwork, we inspire the next generation of innovators to shape the future.

IDEA Lab Layout



Connect us

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