



MEU LABS

LEARN IT DIFFERENT

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# What is **Meu Labs?**

Meu Labs is an open and collaborative learning environment designed to revolutionise STEAM education using project based learning to give students a unique learning experience. Our holistic ecosystem allows your child to explore multiple technologies, industry domains, and creative outlets to gradually understand their own strengths and passions.

We are not just another traditional classroom with exams, grades, or a fixed curriculum that frames unique and creative minds. We recreate a collaborative space where students work as teams to tackle complex and engaging projects that are designed and developed with specific learning outcomes in mind. Students acquire decision making and problem solving skills while scaffolding their theoretical understanding and building competencies in specific technology tools.

Under the guidance of nurturing facilitators who are professionals with a wealth of industry experience from around the world, we allow your child to explore their passions, professionalise their skills, and inspire them to create their own paths to success.

At Meu Labs, learning is not a tedious task but a fun game!



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## Why Meu Labs?

- Help your child become career ready from an early age.
- Follow a curriculum that is inspired by world class Institutions  
Such as the Massachusetts Institute of Technology and Elon Musk's  
Ad Astra.
- Build your child's personal portfolio to secure admission to world class  
universities
- Work with world class Engineers, Scientists and Professionals.
- Allow your child to understand their own strengths and passions  
through experiential learning



# 03 Our Team

Your child will obtain valuable exposure from working and learning with a highly educated and professional team of Engineers, Computer Scientists, Educators, and Mathematicians, who have studied in the best universities in the world such as the Massachusetts Institute of Technology, USA.

They bring with them the expertise of working in countries such as the United Kingdom, United States, Singapore, India, and Sri Lanka across diverse industries such as Education, Data Science & AI, Software Engineering, Banking & Finance, Agriculture & Biotechnology, and Renewable Energies.





# 04 Our Ecosystem

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## Our Ecosystem

Fundamentals



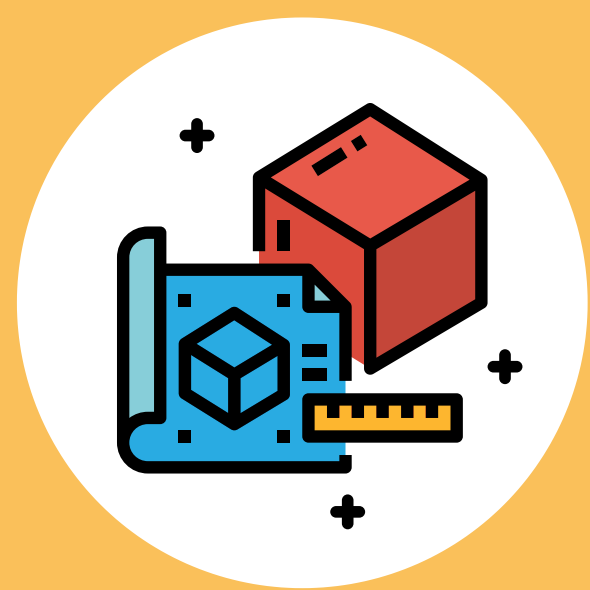
### Knowledge Explorers

Learning Paths



#### Analytics

Focussed on Computer Science, Data Analytics, Economics & Finance, and Scientific Research.



#### Product Design

Focussed on Hands-on Making, Robotics, Electronics & IOT, and Manufacturing.



#### Creative Expression

Focussed on Writing, Graphic Design, Video Production, Music, Theatre, and Art.

Specialisations

- Academia
- Artificial Intelligence
- Astronomy
- Bioinformatics
- Computer Science
- Data Analytics
- Data Science & Mining
- Economics and Finance
- Networking and Cyber Security
- Software Engineering

- Aerospace Engineering
- Biotechnology
- Electronics & IOT
- Energy systems
- Industrial Manufacturing
- Micro Controller Designs
- Nano Engineering
- Product Design
- Robotics

- Craft arts
- Design
- Fine arts
- Multimedia Production
- Performing arts
- Writing and Communication

### Personal Portfolio

#### Academic Mentorship

International University Network

#### Incubator Hub

SEED Fund/Investor Network

#### Talent Hub

Organisational Partners

# Product Design

## Learning Path

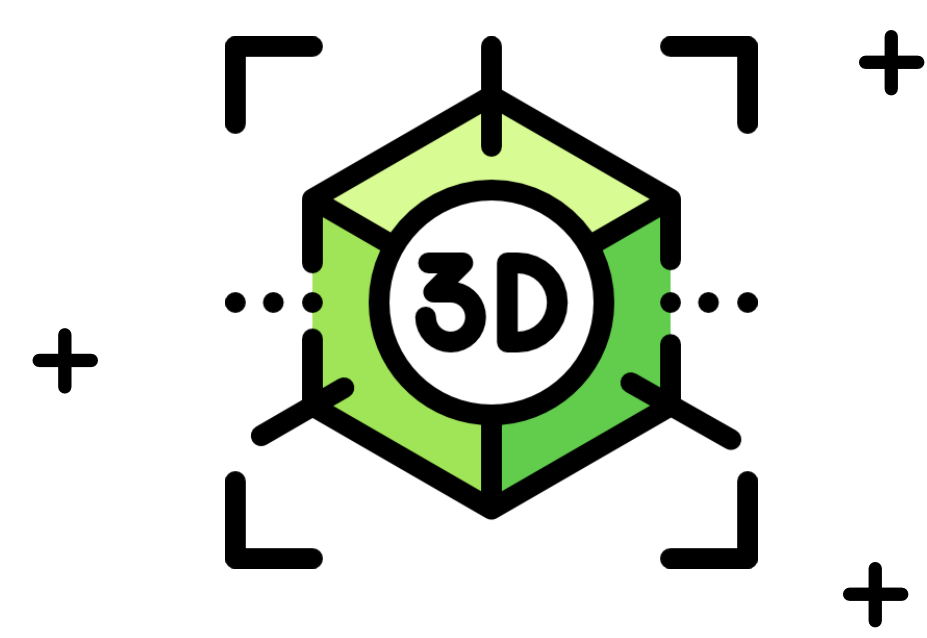
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## Product Design

### Learning Path

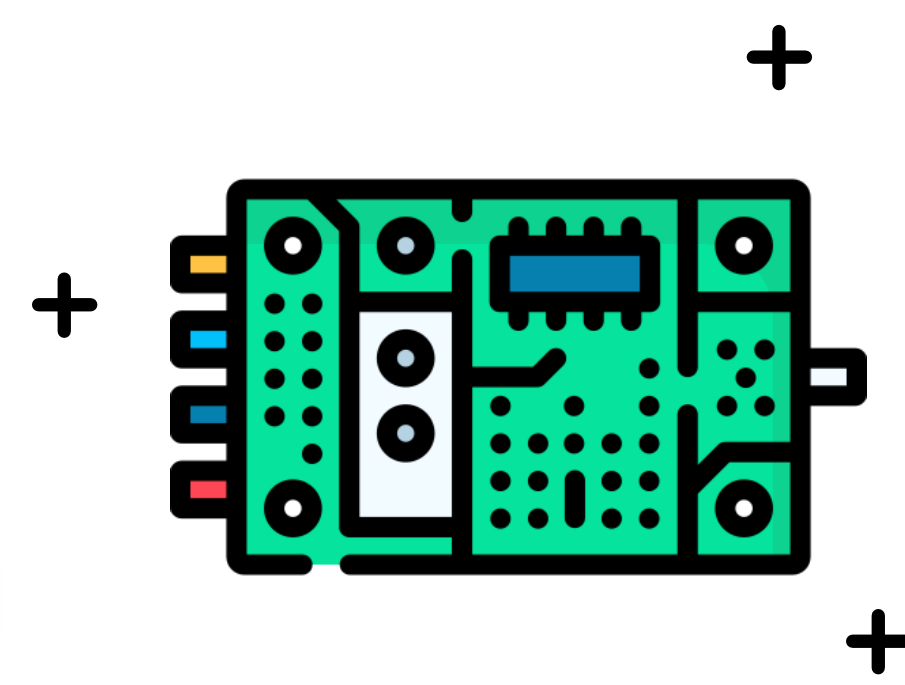
### Flavour 02

Product design module will put your creative child in the shoes of an engineer to learn real-life Engineering skills



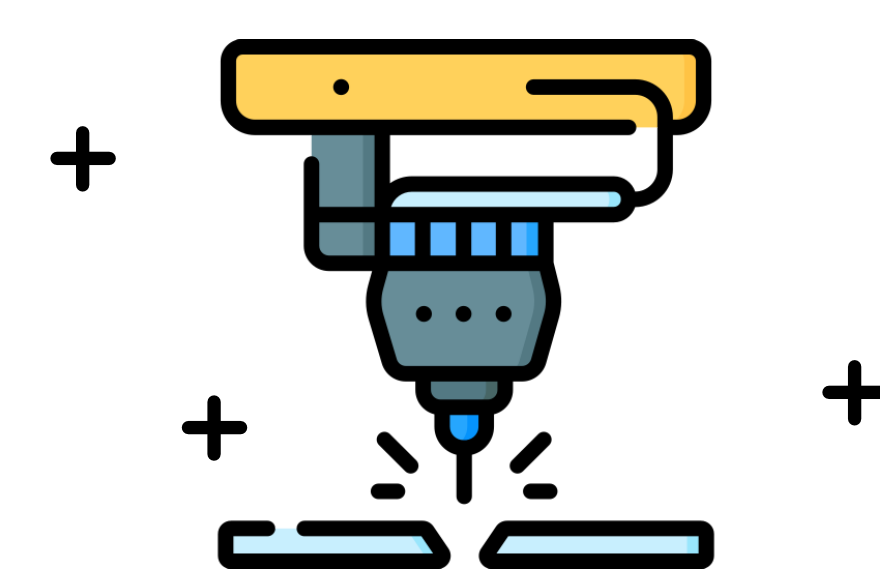
#### Rapid Prototyping

3D Printing, CAD



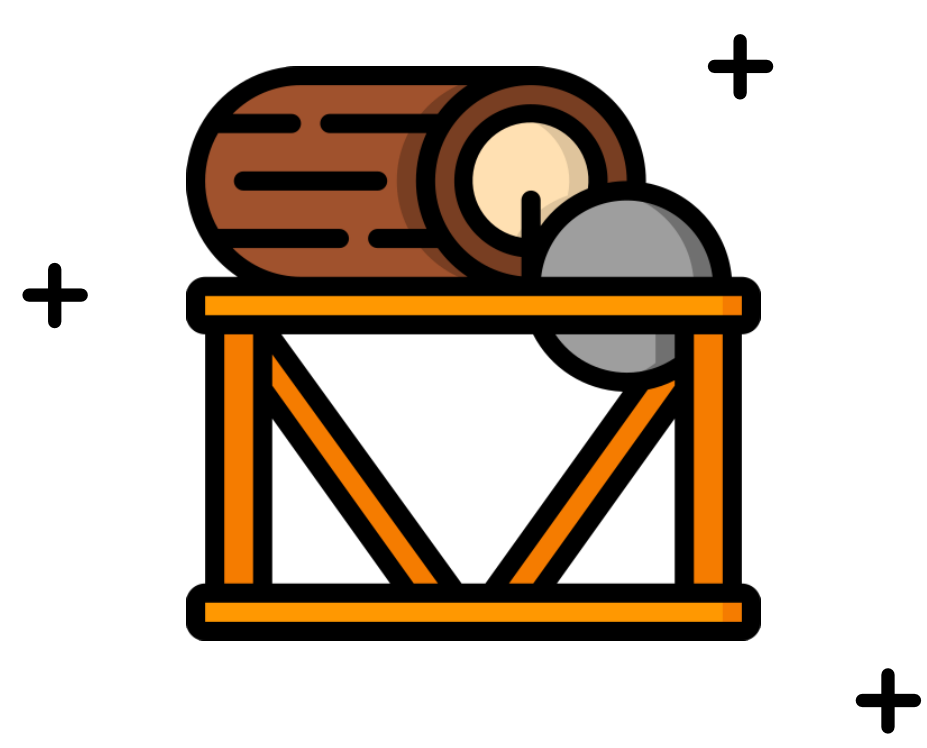
#### Embedded Systems

Liquid Etching,  
Eagle, PCB Design



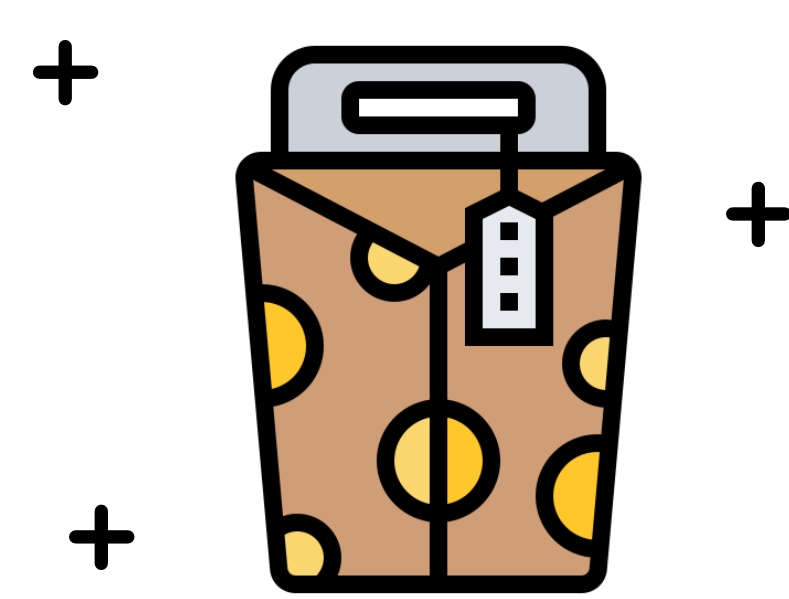
#### Precision Machining

CNC Machine,  
Laser Cutting



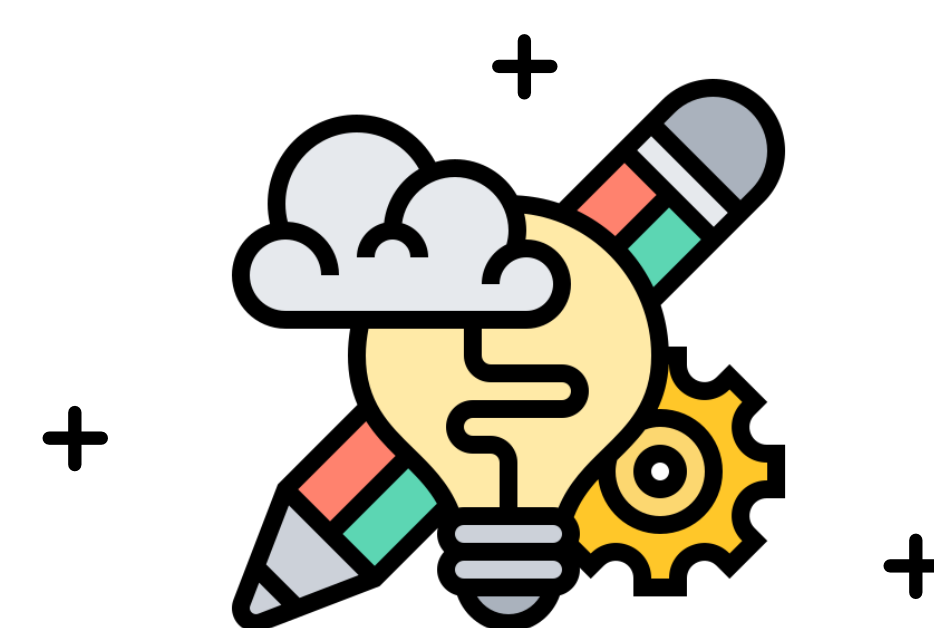
#### Material Fabrication

Wood Working,  
Hand/Power Tools



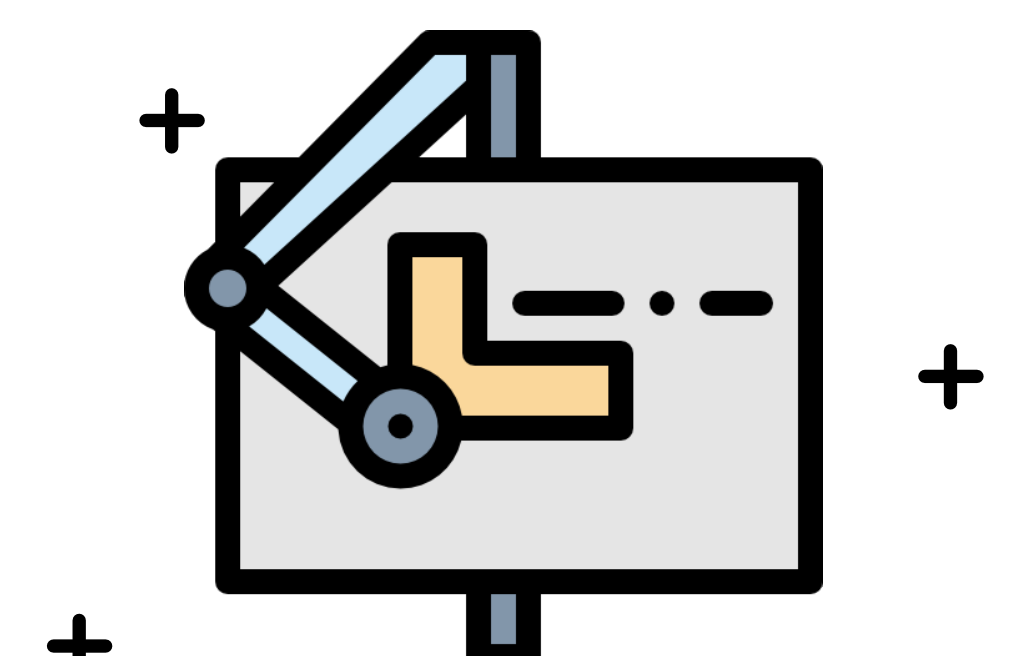
#### Packaging & Branding

Marketing,  
Pitching, QA



#### Product Design

Reverse Eng,  
Design Thinking



#### Physics

FBDs, Energy  
Management,  
Eng. Drawing

On completion of these 7 puzzles students will work on a personal project under the guidance of our Instructors.



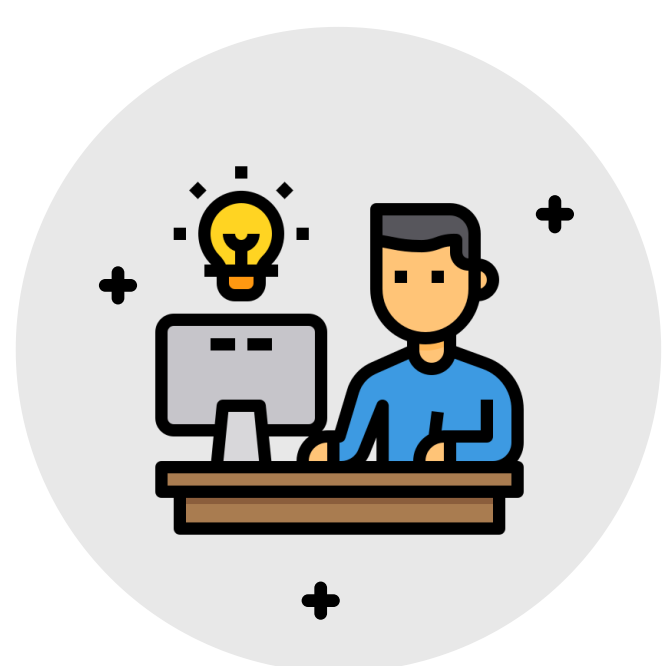
# 06 Class Structure

Meu Labs classes are designed to be student centric with a maximum class size of 20 heads where each student will be assigned to a team of 4. Individual attention is given to each student and a class will have a dedicated tutor who is always available to support and guide our young learners along the way.

## Meu Labs classes will have 3 main session components



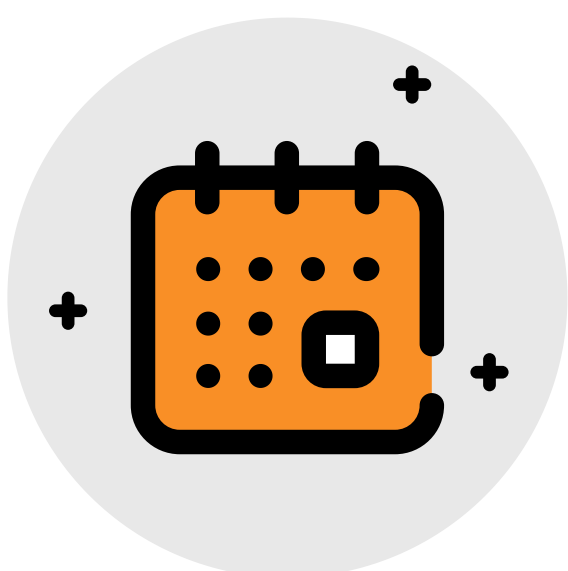
**Field visits** – Observe how products are used in the field and draw inspiration. Have one on one consultations with subject matter experts to fine tune your product



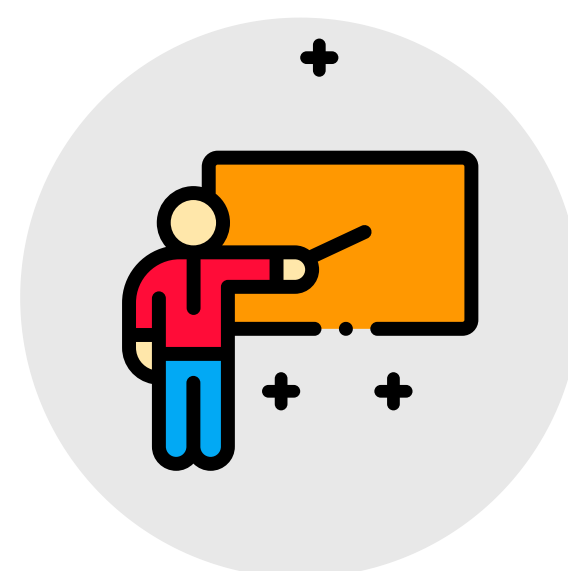
**Master Class** – Structured learning time to develop your confidence as a product designer. Get hands on experience using a diverse array of tools that will help bring your product to life



**Lab Sessions** – Dedicated time for your team to build your product. Work with our lab instructors to develop your product from idea to working prototype within just 4 months



04 Months



32 Sessions



50 Hours



Personalised  
Support



Teacher Student  
Ratio  
1 : 4

# 07 Targetted Skills

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## Targetted Skills



### Rapid Prototyping

- 3D Computer-Aided Designing
- 3D Printing



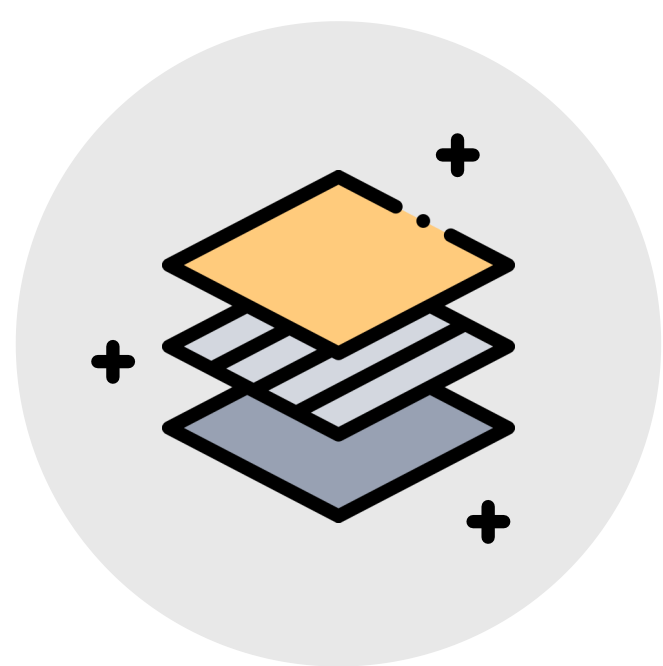
### Electronics and IoT

- Designing and Testing Circuits
- Computer Programming
- Innovation of simple appliances



### Industrial Manufacturing

- Knowledge about CNC machines
- Knowledge about Laser Cutting machines



### Material Science

- Material selection
- Engineering drawing



### Packaging and Branding

- Creating a unique identification and Design for the completed product
- Promoting the 'Smart' product



### Product Design

- Usability research, Ideate product design
- Creative thinking
- Research & Development of products



### Physics

- Center of Mass
- Basic concepts of motion



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Learning Outcomes

Puzzle	Objectives	Learning Outcomes
Rapid Prototyping	Expose students to the basic principles of design thinking	<ul style="list-style-type: none"><li>• Ability to follow a structured and methodical approach when solving a problem</li><li>• Ability to empathize, define, ideate, prototype, and test a product</li><li>• Ability to work as a team/lead a team through the design thinking process to develop a product</li></ul>
	Provide an overview of the product design process	<ul style="list-style-type: none"><li>• Ability to understand basic product design considerations such as requirement definition, aesthetics, functionalities, modularity, product Performance, &amp; quality</li><li>• Ability to search on the internet for product benchmarking &amp; inspirations</li><li>• Follow a continuous improvement process to enhance product quality</li></ul>
	Allow students to use rudimentary CAD design tools	<ul style="list-style-type: none"><li>• Ability to work collaboratively on a CAD platform in developing a single product.</li></ul>
	Allow students to understand the process of 3D printing.	<ul style="list-style-type: none"><li>• Ability to draw 3D designs</li><li>• Ability to inspect 3D printing</li><li>• Ability to understand the key concepts behind 3D engineering</li></ul>
Embedded Systems	Introduce basic embedded systems	<ul style="list-style-type: none"><li>• Understands the concepts of Embedded Systems and their uses.</li></ul>
	Introduction to PCB Design	<ul style="list-style-type: none"><li>• Understands the concepts of Embedded Systems and their uses.</li><li>• Ability to create a PCB design</li></ul>

Puzzle	Objectives	Learning Outcomes
Precision Machining	Introducing high precision machines	<ul style="list-style-type: none"> <li>Understands concept of high precision machines</li> </ul>
	Introduction to CNC machines	<ul style="list-style-type: none"> <li>Ability to inspect CNC machines</li> <li>Ability to understand the key concepts behind CNC cutting</li> </ul>
	Introduction to Laser Cutting machines.	<ul style="list-style-type: none"> <li>Ability to inspect Laser Cutting machines</li> <li>Ability to understand the key concepts behind Laser Cutting Machines</li> </ul>
Material Fabrication	Introduce basic power tools	<ul style="list-style-type: none"> <li>Understands the use of basic power tools</li> <li>Ability to recognize the correct tool to be used when designing the product</li> </ul>
	Introduction to basic wood works	<ul style="list-style-type: none"> <li>Ability to create a simple woodworking setup</li> <li>Ability to understand lumber dimensions and different wood species</li> <li>Understands how to use the essential tools</li> </ul>
Material Fabrication	Introduction to QA	<ul style="list-style-type: none"> <li>Understands the importance of quality assurance of the end product</li> </ul>
	Introduction to packaging and branding	<ul style="list-style-type: none"> <li>Ability to create a finished product with a brand name and product name</li> <li>Ability to create a genuine consumer item</li> <li>Ability to create appropriate packaging for the finished product</li> </ul>
	Introduce to marketing and pitching	<ul style="list-style-type: none"> <li>Ability to pitch/market the finished product</li> </ul>
Product Design	Introduce reverse engineering	<ul style="list-style-type: none"> <li>Ability to understand the idea behind reverse engineering</li> <li>Ability to reverse engineer a given item</li> </ul>
	Introduce design thinking	<ul style="list-style-type: none"> <li>Ability to creatively think about making normal items ‘SMART’</li> </ul>



Puzzle	Objectives	Learning Outcomes
Physics	Introduce basic physics	<ul style="list-style-type: none"><li>• Ability to understand the basic physics behind electronic items and robots</li></ul>
	Introduce FBD	<ul style="list-style-type: none"><li>• Ability to understand the key components of FBD</li><li>• Ability to create a FBD for the given item</li></ul>
	Introduce Energy Management	<ul style="list-style-type: none"><li>• Ability to understand the key components of energy management</li><li>• Ability to understand the importance of energy management when creating a product.</li></ul>

# 09 Student Testimonials

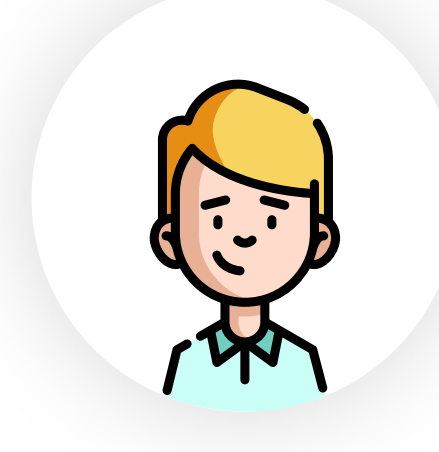
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## Student Testimonials



**Akein Ruwanpathirana,**  
2021 August  
★★★★★

If You Are Finding For A Place Where You Want To Be A Knowledge Explorer Or A Person Who Likes To Learn Things That Will Never Have Met You, Then This Is The Place! This Class Is Very Amazing, Enthusiastic, Unbelievable And Extraordinary!



**Nicole Jacob,**  
2021 August  
★★★★★

This was a really fun experience. I loved the session was always looking forward for it. It was fun and I learned a lot of new things. I highly recommend others to join this.



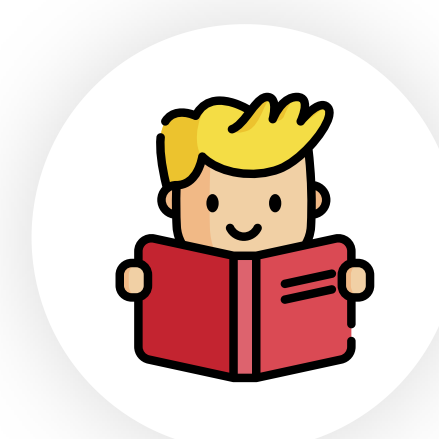
**Sandalu Weerasooriya,**  
2021 August  
★★★★★

I enjoyed all of the puzzles and all of those really helped in developing our team spirit. And the teachers constantly interact with us and reach out to us when we need help in making and developing things. Meu labs gave me a really good knowledge on coding, 3D designing etc. I encourage everyone to join with them and have fun..😊😊❤️



**Pragarshan Prabakaran,**  
2021 August  
★★★★★

I like meu labs especially when you work as a team, I had so much fun and also you can make your OWN mars rover at home. the people who conduct the class will send the parts to make it you can also control the rover with any device. I had a great time during these sessions😊. I highly recommend others to join this



**Nejaan Siriwardena,**  
2021 August  
★★★★★

I really enjoyed this course and I highly recommend this course to everyone. Thank you teachers.

Student testimonial video





# 10 Our Locations

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## Our Locations

### Singapore

📍 417, Yishun Avenue 11, #01-331, Singapore

☎ +65 9389 2999



### Australia

📍 No 86, Clairmont Avn, Cranbourne, 3977, Australia

☎ +61 4445 15267



### Sri Lanka

📍 No 3, Collingwood Pl, Colombo 00600, Sri Lanka

☎ +94 7183 23128

