Welcome to Maker Space course MS-101

The course has 8 instructors, 4 each from Mechanical Engineering and Electrical Engineering.

- Prof. Upendra Bhadarkar (bhandarkar 'at' iitb.ac.in)
- Prof. Ramesh Singh (rsingh 'at' iitb.ac.in)
- Prof. Ankit Jain (a_jain 'at' iitb.ac.in)
- Prof. Soham Mujumdar (sohammujumdar 'at' iitb.ac.in)

Head RA: Mr. Yagyank Srivastava (194109001 'at' iitb.ac.in)

- Prof. Joseph John (j.john 'at' iitb.ac.in)
- Prof. Dinesh K Sharma (dinesh 'at' ee.iitb.ac.in)
- Prof. P C. Pandey (pcpandey 'at' iitb.ac.in)
- Prof. Kushal Tuckley (kushal 'at' ee.iitb.ac.in)

Welcome to Maker Space course MS-101

To match the lecture hall and lab capacities, the class has been divided into 12 batches of 60 students each.

Roll Numbers		Batch	Batch	Inst.
From	To	Number	Size	Section
22B0301	22B0360	B1	60	
22B0361	22B0420	B2	60	P13-P14
22B0421	22B0458	B3	38+	
22B3301	22B3322		22=60	
22B0901	22B0960	B4	60	
22B0961	22B1020	B5	60	P15-P16
22B3323	22B3326	B6	4+	
22B1021	22B1074		54=58	

Please see the detailed schedule for your batch on moodle

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Roll Numbers		Batch	Batch	Inst.
From	To	Number	Size	Section
22B0001	22B0060	B7	60	P19-P20
22B0061	22B078	B8	18+	
22B0601	22B0636		36=54	
22B0637	22B0690	B9	54	
22B0691	22B0750	B10	60	P21-P22
22B0751	22B0771	B11	21+	
22B1501	22B1533		33=54	
22B1534	22B1547	B12	14+	
22B2701	22B2742		42=56	

Please see the detailed schedule for your batch on moodle

MS-101: Learning Outcomes

Through this course, you will learn:

- Basic Mechanical Engineering skills
- Basic Electrical Engineering skills
- Embedded Systems hardware and software
- Application of Engineering skills to real life problems
- Working together in a team

Most of all, we hope you will enjoy learning through lectures, labs and a group project as a part of this course.
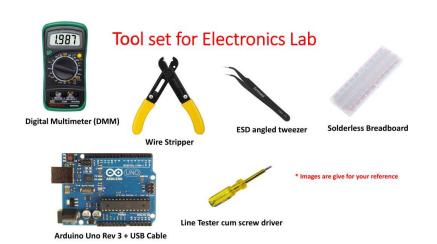
Please see the detailed course manual put up on moodle

MS-101: Tools of the Trade

You will need the following:

- A laptop (with google chrome browser installed).
- Stationery items like pencil, sharpener, eraser, pen, notebook.
- A good quality steel ruler
- Electronic tools like:
  - A digital multi-meter
  - A wire stripper
  - ESD angled tweezer
  - solderless breadboard
  - Line tester/screw driver
  - Arduino Uno Rev 3 board with compatible cable (USB A to USB B).

MS-101: Tools of the Trade

Tool set for Electronics Lab

Digital Multimeter (DMM)

Wire Stripper

ESD angled tweezer

Solderless Breadboard

Arduino Uno Rev 3 + USB Cable

Line Tester cum screw driver

* Images are give for your reference

Lectures and Labs

- IIT B expects 100% attendance. If the attendance drops below 80% (for whatever reason), you risk receiving an XX grade.
- Reach the Lab on time!
  (If you are more than 5 min late, you will be **marked absent**).
  Labs carry 20% wightage for evaluation.
- Bring your laptop, charger, adapter to the lab.
- For the EE labs, bring your tools set.
- EE experiments are to be carried out by each student (not by each group). So **each student** is required to maintain an individual lab record, and must have the completion of each lab assignment signed by their TA.
- You must complete all lab work and show it to the TA **before** leaving the lab.

Evaluation

- Quiz (ME+EE) : 20%
- Midsem: 20%
- Labs: 20%
- Final Project 40%

ME quizzes will be at the end of Lab sessions through moodle.
EE quizzes will be held separately – dates will be announced through moodle.

Honour Code

There will be Zero tolerance towards plagiarism, copying or use of unfair means.

Institute rules provide for harsh penalties for copying, plagiarism as well as for aiding and abetting these activities.

These penalties will be unhesitatingly applied if anyone is found using unfair means or helping someone to do so.