

## Students' Technical Activities Body: Hobby Clubs

Club	Organizing committee	Participation	Events
<b>Aeromodelling</b>	6 members (1 manager + 4UG convener + 1 PG Convener)	250 UG freshmen 100 UG seniors 50 PG students	<ul style="list-style-type: none"> <li>• Workshops and flying sessions</li> <li>• Competitions</li> <li>• Advance Flying session</li> <li>• Lighter than Air Airship Project</li> <li>• Lecture Series</li> </ul>
<b>Electronics</b>	11 members (2 Managers + 7 UG Conveners + 2 PG Conveners)	400 UG freshmen 200 UG seniors 150 PG students	<ul style="list-style-type: none"> <li>• Basic and advanced electronics and hands-on sessions</li> <li>• Hardware Hackathon to promote start-up ideas</li> <li>• Talks and informal discussions</li> <li>• Competitions – Line follower, circuit designing</li> </ul>
<b>Krittika (Astronomy)</b>	7 members (1 Manager, 4 UG convener, 2 PG convener)	100 UG freshmen 50 UG seniors 50 PG freshmen	<ul style="list-style-type: none"> <li>• Night watches</li> <li>• Observation Sessions</li> <li>• Astronomy Visits</li> </ul>
<b>Maths and Physics</b>	7 members (1 Manager + 5 UG Conveners + 1 PG convener)	200 UG freshmen 200 UG seniors 100 PG students	<ul style="list-style-type: none"> <li>• Competitions: Bazinga (Exclusive Maths and Physics Quiz), Maths Olympiad, Logic GC</li> <li>• Lectures by eminent professors</li> <li>• Group discussions</li> <li>• Lab visits</li> </ul>
<b>Robotics</b>	12 members (2 Managers + 8 UG Conveners + 2 PG Conveners)	400 UG freshmen 200 UG seniors 150 PG students	<ul style="list-style-type: none"> <li>• Competitions (XLR8) and abstract based events</li> <li>• Hobby projects</li> <li>• Tech talks</li> <li>• Informal sessions and group discussions</li> </ul>
<b>Web and Coding</b>	12 Members ( 2 Managers + 9 UG Conveners + 1 PG Conveners)	20-30 active people online, Around 100 coders in total, 2-3 discussions a week online	<ul style="list-style-type: none"> <li>• Hackathon</li> <li>• Talks</li> <li>• Workshops</li> <li>• Informal Discussion</li> <li>• Miscellaneous events</li> </ul>

## Students' Technical Activities Body:

### Technovation Program and Infrastructure

Technovation	Organizing Committee	Participation	Projects
	8 Members (3 Managers, 4 UG Conveners, 2 PG conveners)	Mentors Committee: 15-20 senior UG and PG student 7-8 projects taken per year	<ul style="list-style-type: none"> <li>Summer Technovation 2014 – Low Cost CNC machine, Refreshable Braille Display, Tri-copter, Circuit Testing Device</li> <li>Past Years' projects – Tum-Tum Tracker, Parinat ( humanoid robot), Electronic notice board</li> </ul>

### Tinkerers' Lab (TL)

(It is an alumnus funded and student run lab inside the institute)

Organizing Committee	Participation	Equipments and Facilities in TL	
8 Members (3 Managers, 4 UG Conveners, 2 PG conveners)	400 UG freshmen 200 UG seniors 150 PG students  118 ITSP projects, 7 summer Technovation projects and various other hobby projects	Mechanical	Electronics
		Intelitek CNC turn	Kinect
		Intelitek CNC bench	Leap Motion
		3-D printer	Beaglebone
		Lathe	Raspberry Pi
		Milling	Arduino
		Bench and hand grinder	Soldering Station
		Wired and wireless drilling machine	Various ICs
		Column Drill	Voltage source
		Bosch Jig saw and circular saw	Digital Storage Oscilloscope
		Welding machine	Frequency generator
		All kinds of Tools, Nuts and bolts	All kinds of registers and capacitors
		Safety helmets, goggles, Welding helmets, shoes	Wifi and Ethernet ports throughout the lab

## Technical Teams participating in International Competitions

Competitions / Events/Clubs	Participation	Place of Participation	Achievements
<b>Innovation Cell, IIT Bombay</b>  <b>Intelligent Ground Vehicle Competition (IGVC)- 2014</b>  <b>ASME, Student Design Competition (SDC), 2014</b>	<b>IGVC :-</b> 7 UG Third Year and Fourth Year Student  <b>ASME :-</b> 6 UG First Year and 3 UG Second Year Entry from Innovation Cell, IIT B	<b>IGVC :-</b> Rochester, Michigan  <b>ASME :-</b> BITS, Pilani	<ul style="list-style-type: none"> <li>First team to clear Auto Nav Challenge</li> <li>7<sup>th</sup> out of 52 teams participated for the competition</li> <li>Participating in <b>Mahindra RISE Driverless Car Challenge</b></li> <li><b>ASME :-</b></li> <li>First in Asia- Pacific</li> <li>Representing India in World Finals in Montreal, Canada</li> </ul>
<b>“IITB Mars Rover” Team</b> <b>Arkaroola Mars Robot Challenge - Expedition</b>	Participated students :7 Team strength : 20	Arkaroola, Australia	<ul style="list-style-type: none"> <li>Successfully completed terrain traversing test and soil-sample collection test.</li> </ul>
<b>Pratham Student Satellite Team</b>	Members 30	To be launched in space next year, MOU with ISRO	<ul style="list-style-type: none"> <li>More than 20 international and national conference and journal papers</li> <li>Encouraged more than 4 other teams to start student satellites</li> <li>Collaboration with international and national universities to build ground stations</li> </ul>
<b>IIT Bombay Racing (Formula Student UK)</b>	Participated students -26 Teams Participating - 90	Silverstone, UK	<ul style="list-style-type: none"> <li>28<sup>th</sup> in Design Event (100 point out of 150)</li> <li>FS Financial Award – Given to two non UK team</li> <li>One of the nine electric cars to complete Endurance</li> </ul>
<b>International RoboSub</b>	Participating Student - 25	San Deigo, CA, USA	<ul style="list-style-type: none"> <li>2013 – 6<sup>th</sup> – Static Judging</li> <li>Overall – 11<sup>th</sup> position</li> <li>Currently participating ROBOSUB – 2014 – result awaited</li> </ul>
<b>Team Shunya</b>	Faculty – 4 members Students – 34 members	Paris, France	<ul style="list-style-type: none"> <li>Took 1.5 yrs to build house</li> <li>Dismantled house and transported it to Paris</li> <li>House H-naught was rebuilt in 15 days and exhibited to a crowd of &gt;80000 professionals and public</li> <li>Earned a special mention in sustainability award</li> <li>Team of 34 students and 4 faculty members overall finished 18th in a 45 day competition</li> </ul>