

ATL - Lesson Plan



Fields of Training	Modules	Topics	Expected Outcome after the completion of the session	Duration of sessions in weeks (suggestive)
Innovation & Design	Ideation	Introduction to components	Students will be able to generate, develop and communicate ideas and solutions	2
	Design Thinking	Introduction to basic 2D designing. Role and working of different components	Students will be able to internalize the concept of design thinking and empathize, define, ideate, prototype and test solutions	2
	Computational thinking	Evaluation of problem, Researching possible solutions, Analysing most feasible solution, sequencing, flowchart designing	Students will be able to decompose problems, recognize patterns, create flow charts and design algorithms	2
Technical Know-how	Digital Literacy	Digital Marketing, Data mining, Drafting social media posts, Media and Content Processing	Students will be able to use information and communication technologies to find, evaluate, create, and communicate using both cognitive and technical skills.	1
	3D Modeling with software	Autocad, CURA, MatterControl 2.0, Tinker CAD, Meshmixer	Student will be able to create CAD models of equipment to be printed.	4

		Prototyping with a 3D printer	Assembling of a 3D printer, Roles and mechanisms Operating 3D Printer, Making Connections, Initialising digital file	Student will be able to make three dimensional solid objects from a digital file.	3
		Prototyping with mechanical and electric power tools	Hovercraft, Aeromodelling, RC machines	Students will be able to prototype and use mechanical and electric power tools to translate conceptual ideas into tangible physical prototypes	4
		Physical computing and Intelligence	Gesture Controlled robots, Basic MATLAB, Neurocontrolled devices, Artificial intelligence	Students will be able to build/design/create/make interactive physical systems that use various kinds of software and hardware to sense and respond to an external stimulus	4
		Building Robots	Application of IOT, Fabrication of robots as per problem statements	Students will be able to build robots using the kits in ATL	4
Inspirational		Sharing Inspirational real-life experiences		Students will feel inspired and motivated to be solution-oriented in the face of adversities.	1
		What is Intellectual Property	What is intellectual property, Concept of Patent, Copyrighting, Trademark, Procedures followed	Students will be able to explain the concept of intellectual property and related concepts	1
Business & Entrepreneurship					

Effective Communication	Developing soft skills	Student Ambassador drills	Students will be able to understand the importance of inter-personal skills and will start working on developing theirs	1
	Effective communication	Mock Fairs , Model Marathons and Summits	Students will be able to exchange ideas & thoughts amongst themselves as well as present these to other people, comfortably.	3

Total Involvement	32 weeks
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* Every Module consists of Hands-On practices followed by Training Sessions