Andhra Loyola Institute of Engineering and Technology

Capacity Enhancement Courses

1. Certification Courses

If you are looking to advance your academics in the tech world or to gain prospects, ALIET is the right choice. It deals with students in a regular basis and cares for the future generation's career path by introducing numerous certification courses for the advanced learners and remedial/makeup classes for the slow learners. Certification courses are offered to the aspiring students to elevate their skills in the ever changing world of technology. They train them in a wide spectrum of fundamental technical concepts. The certification courses aim to produce competent, creative and imaginative engineers with a strong scientific acumen. ALIET offers the right guidance & training to kindle the academic journey of the future technocrats.

1.1 Computer Science and Engineering:

Objectives:

- > To build academic credibility and prestige of the learners to compete in the ever- changing world
- ➤ To organize training programs to enhance employability competences of the students.
- > To train and educate the learners on cutting-edge technologies in this emerging area.

Functions:

- ✓ Students get opportunities to interact with eminent persons from reputed institutions and companies which help them to plan their career.
- ✓ Students are trained in a wide spectrum of fundamental technical areas like game development in Build Box, Amazon Web Services, Google Android Developer, Java, C Programming, Database Programming with Pl/Sql.
- ✓ Learners are updated with the essential skills and knowledge through video lectures, online tests and demonstrations.
- ✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.
- ✓ Learners are equipped with the essential skills through video lectures, online tests and demonstrations to catch upon industry trends.

List of the certification courses conducted by Department of CSE:

S.No	Course ID	Title of the course	Duration
1	CS181904	Database Design and Programming With SQL	2 Months
2	CS181905	Java Fundamentals	2 Months
3	CS181906	Java Programming	2 Months

4	CS171802	Database Programming with Pl/Sql	4 Weeks
5	CS171803	Cisco Networking Academy® Introduction to Cyber security	4 Weeks
6	CS171804	CS171804 Database Design and Programming with Sql	
7	CS161701	Java Programming	4 Weeks
8	CS161702	Emc Academic Associate, Data Science and Big Data Analytics	4 Weeks
9	CS161703	Java Fundamentals	4 Weeks
10	CS161704	Database Design and Programming with Sql	4 Weeks
11	CS161705	Summer Training Program on Iot With Python	4 Weeks
12	CS161706	Summer Training Program Web Application Development Using Python	4 Weeks
13	CS161707	Summer Training Program Algorithm Design Techniques	4 Weeks
14	CS171801	C Programming Fundamentals	2 Weeks
15	CS151601	Project Skill Training	2 Weeks
16	CS181907	Virtualization Using Vsphere	1 Week
17	CS171805	Virtualization Using Vsphere	1 Weeks
18	CS161708	Virtualization Using Vsphere	1 Weeks
19	CS181901	Game Development in BuildBox	3 Days
20	CS181902	Amazon Web Services Technical Essential Workshop	1 Day
21	CS181903	Google Android Developer Fundamentals Workshop	1 Day

1.2 Electronics and Communication Engineering

Objectives:

- ➤ To enhance the knowledge and skills of the learners in Electronics and Communication Engineering.
- > To impart guidance in the preparation of competitive exams.
- ➤ To apply Electronics and Communication Engineering to address the full range of technical and societal problems with creativity, imagination, confidence and responsibility.

Functions:

- ✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.
- ✓ Providing fundamental knowledge in thrust areas like Basic Programming in Python, Entrepreneurship Awareness, Game Development in Build Box, PCB Design, RF Antenna Design, MATLAB Programming, NI Labview, latest Telecom Technologies etc.
- ✓ Learners are equipped with the essential skills through video lectures, online tests and demonstrations to catch upon industry trends

List of the certification courses conducted by Department of ECE:

S.No.	Course ID	Title of the course	Duration
1	EC161702	Iot With Phython (Apssdc)	1 Month
2	EC151601	Project Skill Training Program (Apssdc)	2 Months
3	EC161704	Overview on Latest Telecom Technologies	3 Days
4	EC181903	Game Development in BuildBox	3 Days
5	EC181904	IOT Advanced	3 Days
6	EC181905	RF Antenna Design	3 Days
7	EC171803	A Role of Transducers and Programmable Devices in Iot Applications	3 Days
8	EC181905	PCB Design	2 Days
9	EC181906	Role of Transducers and Programmable	2 Days
10	EC171803	Devices IOT Applications	3 Days
11	EC171801	Intoduction To Matlab	2 Days
12	EC161706	A Role of Transducers and Programmable Devices in Control And Medical Applications Using Iot	2 Days
13	EC181902	Entrepreneurship Awareness Camp	1 Day
14	EC161705	Entrepreunership Development	1 Day
15	EC161701	Ni Labview	18 Hours
16	EC171802	Pcb Design	12 Hours
17	EC151602	Pcb Designing	12 Hours
18	EC151603	Overview on Latest Telecom Technologies	12 Hours
19	EC141501	Overview on Latest Telecom Technologies	12 Hours
20	EC141502	Pcb Designing and Manfacturing	12 Hours
21	EC161703	Pcb Design	12 Hours

1.3 <u>Information Technology</u>

Objectives:

- > To enhance the knowledge and skills of the learners in Information Technology.
- > To impart guidance in the preparation of competitive exams.
- > To apply Information Technology to address the full range of technical and societal problems with creativity, imagination, confidence and responsibility.

Functions:

✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.

- ✓ Providing fundamental knowledge in thrust areas like Cyber Security, Palo Alto Networks, Gamification, WebApps etc to the aspiring learners.
- ✓ Learners are equipped with the essential skills through video lectures, online tests and demonstrations to catch upon industry trends.

List of the certification courses conducted by Department of IT:

S.No.	Course ID	Title of the course	Duration
1	IT161701	Java Fundamentals	3 Months
2	IT181902	Cyber Security	6 Days
3	IT181901	Game Development in BuildBox	3 Days
4	IT181903	Web Applications Phase-1 &2	3 Days
5	IT171801	Amazon Web Services Technical Essential Workshop-2017	2 Days

1.4 Electrical and Electronics Engineering

Objectives:

- To organize training programs to enhance employability competences of the students.
- > To extend support in choosing a career.
- ➤ To enhance knowledge for implementation of real time applications.
- > To train and educate the learners on cutting-edge technologies in this emerging area.

Functions:

- ✓ Providing fundamental knowledge in thrust areas like Solar Energy: Need & Applications, Smart Energy Systems, MAT LAB, LabVIEW, Embeeded Systems IOT
- ✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.
- ✓ Learners are equipped with the essential skills through video lectures, online tests and demonstrations to catch upon industry trends.
- ✓ Introducing different government policies required for business establishment, developing projects of different sensors, technologies and communication modules.

List of the certification courses conducted by Department of EEE:

S.No.	Course ID	Title of the course	Duration
1	EE161702	Embedded Systems (Iot) Fundamentals	30 Days
2	EE171801	Embedded Systems (Iot) Fundamentals	23 Days
3	EE161704	Plc and Scada	20 Days
4	EE181903	Solar Smart Energy Systems	3 Days
5	EE161703	Applications of Matlab	3 Days
6	EE161701	Ni Lab View Workshop	3 Days
7	EE171802	Applications of Aurdunio	2 Days
8	EE181902	E-CAD	2 Days
9	EE181901	Applications of MAT LAB	2 Days

1.5 Civil Engineering

Objectives:

- ➤ To enhance the knowledge and skills of the learners in engineering drawing, advanced modeling tools etc.
- ➤ To impart guidance in the preparation of competitive exams.
- > To apply civil engineering education to address the full range of technical and societal problems with creativity, imagination, confidence and responsibility.

Functions:

- ✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.
- ✓ Providing fundamental knowledge in thrust areas like Revit Architecture, Autodesk Robot Structural Analysis, Auto Cad etc.
- ✓ The learners are trained to use advanced techniques and skills to design modern engineering tools like 2D, 3D and generate an array of components of compound solids.
- ✓ The learners are guided on how to elevate their skills through demonstrations, training, and lectures.

List of the certification courses conducted by Department of CE:

S.No.	Course ID	Title of the course	Duration
1	CE161702	Summer Training Programme on Robot Structural Analysis	4 Months
2	CE161701	Autodesk Certified User - Auto Cad	4 Months
3	CE171803	Revit Summer Training Programme on Architecture, 3D Max, Robot Structural Analysis	2 Months
4	CE171802	Autodesk Certified Professional: Revit® Architecture (Batch-16)	2 Months
5	CE171801	Autodesk Certified Professional: Revit® Architecture (Batch-14)	2 Months
6	CE181901	Autodesk Certified Professional: Revit® Architecture	3 Weeks

1.6 Mechanical Engineering

Objectives:

- To enhance the knowledge and skills of the learners in Mechanical Engineering.
- > To impart guidance in the preparation of competitive exams.
- > To apply Mechanical Engineering to address the full range of technical and societal problems with creativity, imagination, confidence and responsibility.

Functions:

✓ Students get opportunities to interact with eminent persons from reputed institutions and companies.

- ✓ Providing fundamental knowledge in thrust areas like CATIA V5, NC/CNC,welding techniques, Auto CAD, Auto Desk etc to coordinate mechanical engineering models into the design development process
- ✓ Learners are equipped with the essential skills through video lectures, online tests and demonstrations to catch upon industry trends

List of the certification courses conducted by Department of ME:

S.No.	Course ID	Title of the course	Duration
1	ME181901	Welding Lab	1 Month
2	ME171803	Solid Edge	1 Month
3	ME171802	Welding Lab	24 Days
4	ME171804	CNC	24 Days
5	ME161704	Welding Lab	21 Days
6	ME161705	CNC	16 Days
7	ME161701	Advanced Auto Cad Summer	9 Days
8	ME161702	Catia V5 Mechanical Designer-	9 Days
		Summer	
9	ME161703	Autodesk Auto Cad	9 Days
10	ME171801	Catia Designer Workshop	6 Days

2. Remedial Coaching and Mentoring

The objective of remedial teaching is to give additional help to learners who, for one reason or another, have fallen behind the rest of the class in core subjects. In the course of teaching process during regular class lectures, slow learners and under achievers are identified. The concerned professor in charge of the course keeps a record of the slow learners. The management and faculty regularly interact with the parents of the learners. Remedial classes are conducted from 4.10 to 5.00 pm to meet the needs of the slow learners. The mentors and professors in charge of the course have been given the responsibility of addressing the problems of the slow learners. The answer scripts and the score of the weekly tests are shown to the students drawing their attention to the areas of knowledge deficiency, misconception and inability to express knowledge. Assignments and home work are given to the learners to measure their comprehension.

Objectives:

- ➤ To motivate and help the academically weaker students to realize their limitations and help them to improve on their fronts.
- > Improving academic skills of the learners in various subjects.
- ➤ Raising their level of comprehension of basic subjects to provide a stronger foundation for academic learning.
- > Strengthens their knowledge skills and attitude in such subjects.