ADDITIONAL SKILL ACQUISITION PROGRAMME asap

ADVANCED SKILL DEVELOPMENT COURSES

Contents

Additional Skill Acquisition Programme (ASAP)

The Additional Skill Acquisition Programme (ASAP) is a skilling intervention, jointly implemented by the Department of General Education and the Department of Higher Education, Government of Kerala, targeted towards tackling the issue of low employability among youth in Kerala, by imparting foundation skills and industry-relevant training to select students of Government and Government-aided schools and undergraduate colleges, which are associated Partner Institutions within the programme. From its inception in 2012, ASAP has been able to make commendable impact within the skilling eco-system in the State, both in terms

of skilling the youth of the State, as well as implementing national qualification framework and establishing programme-wise quality assurance framework.

Advanced Skill Development Centers (ASDCs)

Realizing the gap between the skill sets required by the industry and the knowledge level of the students in Higher education institutions in the state, ASAP set up its Advanced Skill Development Centres in Engineering Colleges and Polytechnics across Kerala. The ASDCs are envisioned to equip students with futuristic and advanced skill sets required for 4.0 industrial revolution. The training conducted through ASDCs will be in sync with industry requirements regularly updated to meet emerging market needs and will be transacted through qualified and competent professionals thereby equipping students with the skills, capabilities and competencies required to be globally competitive and tap the emerging potential opportunities.

What we do?

Identifying institutions for setting up ASDCs:

The institutions where the ASDCs are set up and courses are offered are identified considering academic factors such as the results of students, interest of the institution fraternity towards new schemes, infrastructure available at the institutions, etc. A nodal officer is also appointed at each ASDC for coordinating the activities for the respective institution.

Faculty Development Programmes:

Based in the underlying perception that the upskilling of the pupil begins with the upskilling of the teacher, ASAP conducts

regular “Training of Trainers” programmes to bring to pace the faculty members with the changes in the technologies used by the industry.

Student Mobilization:

ASAP has a strong team of over 200 Programme Managers across the state who are actively involved in student mobilization activities such as campaigning at each institution and orientation to the students across colleges and subject streams to facilitate informed decision-making.

Offer courses based on Industry Skill Requirements

Based on field surveys and analysis of various studies conducted we list down the courses that are currently industry-relevant. The courses and the curriculum is regularly updated to meet the emerging market needs and prepare human resources in future ready skills demanded by 4th generation industry. The courses offered at ASDCs are either developed in-house by the Curriculum division of ASAP or offered by major industries working in the skill development domain. All the courses offered at ASDCs are NSQF aligned.

Course transaction:

The courses are offered at ASDCs using teaching aids such as videos, presentations and study material, that is available both offline as well as online, to ensure that core ideas and concepts are delivered in the intended manner. The faculty trained through the FDP aid the students in completing the courses on time. Furthermore, innovative strategies such as focus group discussions are conducted among students at different skill levels to understand their aspirations. Feedbacks are collected from students at regular intervals to formulate training methods that suit student needs.

Assessment & Certification:

The assessments for the courses are conducted by the industry partners through separate assessment platforms. The students successfully completing all Modules and assessments of the course, will be jointly certified by ASAP and the respective industry partner who is the course provider for that course

Courses to be offered in Engineering Colleges:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Artificial Intelligence Developer	756 Hours	S5	Any	ASAP	Rs 35000/-	Exact Amount to be fixed
Life Skill Module	100 Hours	3rd Semester	Any	ASAP	Rs3000/- Engineering Colleges	Rs 2500/- (BEC Certification)
Google Associate Cloud Engineer	48 Hours	7th Semester	CS/IT/ECE	Google	NIL	40$
Robotic process Automation	42 Hours	5th Semester	Any	UiPath	NIL	150$
Virtual Reality 201 – beginner Level	60 Hours	5th Semester	Any	Facebook School of Innovation – sv.co	NIL (for 1st Batch)	NIL (for 1st Batch)
TCS – Industry Honor Certification	4 Semesters (Each Course 90 Hours)	5th Semester	Any	TCS	Rs 42000/- for 4 electives	IHC will be awarded for students who successfully complete all 4 courses
Salesforce Developer	92 Hours	7th Semester	Any	Salesforce	NIL	200 $
Salesforce Administrator/ Business Analyst	48 Hours	3rd Semester	Any	Salesforce	NIL	200 $
Generative Design Beginner Level	45 Hours	3rd Semester	Mechanical/ Civil	AUTODESK		Rs 3000 + GST
AWS Academy Cloud Foundation	20 Hours	5th Semester	Any	AWS Academy	NIL	50$ + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75$ + GST
SDPK Courses	Details will be communicated later					

Courses to be offered in Polytechnics:

Course Name	Duration	Beneficiary Category	Branch	Industry Partner	Fees	Certification
Life Skill Module	100 Hours	1st Semester	Any	ASAP	Rs 1500/- for Polytechnic	Rs 2500/- (BEC Certification)
Salesforce Administrator/ Business Analyst	48 Hours	3rd Semester	Any	Salesforce	NIL	200 $
Salesforce Developer	92 Hours	5th Semester	Any	Salesforce	NIL	200 $
Generative Design Beginner Level	45 Hours	3rd Semester	Mechanical / Civil	AUTODESK	NIL	Rs 3000 + GST
AWS Academy Cloud Associate	40 Hours	Students completing Cloud Foundation	Any	AWS Academy	NIL	75$ + GST

ARTIFICIAL INTELLIGENCE DEVELOPER

ABOUT THE COURSE: Artificial Intelligence is the development of computer systems that are able to perform tasks that would require human intelligence. Machine learning is an application of Artificial Intelligence that gives machines the ability to learn and improve without the help of humans or new programming. Artificial Intelligence and Machine learning (AIM) is an emerging area of great interest nowadays. Artificial Intelligence and Machine Learning Course was designed by ASAP and approved by NSDA, the course is NSQF level 7. Through this training students will get a great understanding on the AIML concepts and after completing this course, they will be at an intermediate level of expertise from where they can take themselves to higher levels of expertise.

Objective

- Gain a historical perspective of AI and its foundations.
- Become familiar with basic principles of AI toward problem solving- inference- perception- knowledge representation- and learning.
- Investigate applications of AI techniques in intelligent agents- expert systems- artificial neural networks and other machine learning models.
- Experience AI development tools such as an 'AI language'- expert system shell- and/or data mining tool.
- Experiment with a machine learning model for simulation and analysis.
- Explore the current scope- potential- limitations- and implications of intelligent systems.

COURSE OUTCOME:

After the completion of the course the student will be able to

CO 1	Demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations.
CO 2	Apply basic principles of AI in solutions that require problem solving- inference- perception- knowledge representation- and learning.
CO 3	Demonstrate awareness and a fundamental understanding of various applications of AI techniques in intelligent agents- expert systems- artificial neural networks and other machine learning models.
CO 4	Demonstrate proficiency developing applications in an 'AI language'- expert system shell- or data mining tool.
CO 5	Demonstrate proficiency in applying scientific method to models of machine learning.
CO 6	Demonstrate an ability to share in discussions of AI- its current scope and limitations- and societal implications

COURSE HIGHLIGHTS

- Blended learning
- NSDA approved NSQF level 7 skill course
- Live sessions from Industry experts
- Project Mentoring by Industry
- 50 % scholarship from the course fees
- Financial assistance for students through Skill loans

COURSE DETAILS:

PROJECTED JOB OPPORTUANITIES:

- Artificial Intelligence/Machine Learning Scientist
- Computer Scientist AIML
- Data Scientist
- Machine Learning Engineer
- Robotics Scientist
- Business Intelligence Developer
- AI Research Scientist

PARTICULARS	ARTIFICIAL INTELLIGENCE DEVELOPER
DURATION	756 Hours
TRAINER	INDUSTRY EXPERTS/ FACULTY COORDINATORS
MODE OF DELIVERY	ONLINE PLATFORM
BENEFICIARY GROUP	SEMESTER 5th
BRANCH	ANY BRANCH
FEE STRUCTURE	Rs 35000/- (3 installments) 1st Installment- Rs 12000/- 2nd Installment- Rs 12000/- 3rd Installment- Rs 11000/-

SYLLABUS OF THE COURSE

MODULE 1 | Classical machine Learning

Python Fundamentals- Scientific Python- Linear Algebra- Random Process- Optimization Techniques- Introduction to Machine Learning-Supervised Learning – Regression Supervised Learning – Classification - Non Parametric Techniques- Unsupervised Learning -Model evaluation

MODULE 2 | Deep Learning Techniques

Bayesian and Mixture Models- Inference techniques-Text Mining- Introduction to deep learning-Neural Network Architecture -Back Propagation and Regularization -Deep Learning Architectures -Generative Models -Deep Reinforcement Learning

MODULE 3 | Project / Internship

Conceptualization, design, development, and evaluation of an artificial Intelligent model using classical or deep machine learning framework.

APPLICATION LINK

https://sites.google.com/asapkerala.gov.in/aiml/home