COURSE PROSPECTUS

Name of the Division: Advanced Computing Services Division
Name of the Course: Artificial Intelligence Application Developer
NSQF aligned course of Level 4.5
Course Code: QG-4.5-IT-00358-2023-V1-NIELIT
Mode of Conduction: Online
Starting Date: 04-June-2024
Duration: 540 hours / 3.5 months
Course Fee: Rs 31,860 (includes course fee, NSQF registration & exam fee + GST)
Course Coordinator: Dr. Vimala Mathew, 9446017466

Objective of the Course: The Artificial Intelligence (AI) Application Developer Qualification will cover the fundamentals of Python programming and libraries like NumPy and pandas used for data analysis. The course will also cover Visualization with Matplotlib. The course will stress on developing programming skills by providing practical exposure to the aspiring Python developers and also introduce to the concepts of Machine Learning. Participants from any background can develop the skills needed to become an AI Application Developer.

Course Structure:

Sl. No	Module Title	Duration (Hours		
		Theory	Lab	Total
1	Programming with Python	20	40	60
2	Conceptualizing Data Science with Python	24	36	60
3	Data Analysis & Visualization	34	56	90
4	Machine Learning fundamentals	12	18	30
5	Performance of Machine Learning models	35	55	90
6	Fundamentals of Deep Learning	25	35	60
	Total	150	240	390
7	Employability Skills (B)	60		
8	Project	90		
	Total Duration/Credit	**150**	**390**	**540**

Career Progression Path on completion of the course

Academic:
Vertical:
Level 5: Courses in AI: AI -Machine learning Developer, Machine Learning Engineer -> Level 6: Courses in AI: AI - Business Intelligence Analyst, AI – Database Administrator, AI – Data Quality Analyst, AI – DevOps Engineer

Professional:
AI Engineer-> Machine Learning Engineer -> Business Intelligence Developer -> AI Research Scientists

Other Contents

I.   Course Fees:

Rs 25000/- + all taxes as applicable.

II.   Registration Fee: An amount of Rs. 1000/- (including all taxes as applicable, nonrefundable) should be paid at the time of registering for the course.

If the student enrolls in the course, this fee will be included as part of the course fee. If the student does not enroll in the course, the fee paid will be forfeited.

However, above the registration fee shall be refunded on few special cases as given below
  ➢ Course postponed and new date is not convenient for the student.
  ➢ Course cancelled in advance, well before the admission date.

III.   Course Fee Installment Structure

Students can pay the full fees as per schedule below

Fees	*Amount	Due Date (on or before)
Registration Fee	Rs. 1000/-	25/05/2024
Course Fee	Rs. 28500/-	30/05/2024
NSQF Course Registration fee	Rs 236/-	
NSQF Theory Exam fee	Rs 1180/-	
NSQF Practical Exam fee	Rs 354/-	
NSQF Project Evaluation Fee	Rs 590/-	
Total Fee	Rs. 31860/-	

*Above fees are inclusive CGST 9% and SGST 9%, and revision, if any by Government shall be applicable at the time of payment.

For more details on course and examinations please refer Qualification file

Link to Course QUALIFICATION FILE

IV.   Eligibility: Any one of the following

  • Completed 1st year of B.Tech/BCA/BSc
  • Pursuing 1st year of B.Tech/BCA/BSc and continuing education
  • Pursuing 3rd year of 3-year diploma after 10th and continuing education
  • Completed 3-year diploma after 10
  • Completed 2nd year of 2-year diploma after 12th
  • Pursuing 2nd year of 2- year diploma after 12 and continuing education
  • Previous relevant NSQF Level 4 qualification with minimum 8th Grade pass

V.   Number of Seats: 30

VI.   Selection of candidates: Based on marks in the qualifying exam.

VII. Test/Interview (if applicable): NA

VIII. Certificate Verification/Admission in Online Mode: 30-Jun-2024

IX. Important Dates:

Last date for submitting application : **25-May-2024**
Selection intimation through mail/website: **26-May-2024 (After 5.00 PM)**
Certificate Verification/Admission: **30-May-2024**

X. Course Timings: Live sessions covering Theory will be scheduled between 9.30 am to 5.00 pm. Prerecorded videos /Recorded videos of live sessions can be viewed any time of your convenience. Assignments and projects can be done any time of your convenience and submitted before the deadlines provided. Support for completing lab work/assignments will be provided at scheduled timings through live sessions or through online forums.

XI. Placement: Placement assistance will be provided.

XII. NIELIT NSQF Examination

To get NIELIT NSQF certification, participants should pass the examinations. **Participants should attend the online theory and practical examinations conducted by NIELIT HQ New Delhi, from either NIELIT Calicut or from a nearest NIELIT accredited/facilitation Centre**.

XIII. Certificate

Successful candidates will be issued certificate by NIELIT HQ, New Delhi through certificate.nielit.gov.in.

Candidates who do not attend / fail the online NSQF examination as per the norms, only digitally signed course completion certificate shall be issued (subject to fulfilling all the mandatory requirements mentioned under 'Terms and Conditions' below) by NIELIT Calicut to their registered e-mail ids.

XIV. Lab Facilities

Participants will be given access to the workstation with the following specification to carry out their lab exercises and project. Necessary software will be installed in the system.

HP Z4 Workstation with:
Processor: Intel(R) Xeon(R) W-2295 CPU @ 3.00GHz (18 Core)
RAM: 128 GB
GPU: NVIDIA Corporation GA104GL [RTX A4000]
HDD: 2TB NVME, 2TB HDD
NIC: Dual Gigabit

XV. Course Contents: [Detailed Course Syllabus /Contents Link](#)

XVI. Terms and Conditions

1. After the commencement of course, candidates have to register in NIELIT portal at student.nielit.gov.in for course registration and later for exam registration, as per the guidelines issued by the course Coordinator.

2. In case any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated

3. In case the online course is cancelled /postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.

4. No course/exam fee shall be refunded to candidates not attending/failing the examination. Only completion certificate shall be issued to such candidates subject to fulfilling all mandatory requirements mentioned below.

5. 60% attendance and feedback submission are mandatory for awarding 'successfully completed certificate' and is also subject to the candidate passing the exit test with minimum 50% marks.

6. Candidates failing in any of the NSQF examination component (theory/practical) can reappear for the failed component alone by paying the requisite fee.