CENTRE OF EXCELLENCE IN INFORMATION TECHNOLOGY (CEIT)

UNIVERSITY OF PAPUA NEW GUINEA

CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING

A Scientific Society of Ministry of Electronics and Information Technology, Government of India

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Ministry of External Affairs
GOVERNMENT OF INDIA

Independent State of
PAPUA NEW GUINEA

Centre of Excellence in IT

A premier institute for training and enhancement of Information Technology skills funded by the Government of the Republic of India in collaboration with the government of the Independent State of Papua New Guinea and operated in association with University of Papua New Guinea (UPNG) and Centre for Development of Advanced Computing (C-DAC).

Vision

Create a pool of knowledge workers and generate employment opportunities by producing world class IT professionals.

Mission

- To emerge as a premier platform in Information and Communication Technologies in Papua New Guinea country for human advancement.
- To generate knowledge with the dissemination of cutting edge ICT programs, for promoting professional and economic growth.
- To groom the students to work on current technology as well as prepare them to keep pace with the changing face of technology and the requirements of the growing IT industry.
- To create an industry-ready talent pool to cater the Information and communications technology (ICT)

About CEIT

"Centre of Excellence in IT" in Papua New Guinea- National Capital District at University of Papua New Guinea (UPNG), is the outcome of the interest of the Papua New Guinea government in seeking assistance from India for development of ICT in Papua New Guinea.

A MoU was signed between the two countries for training in the specialized field of IT and expanding the area of cooperation between the two countries in these fields. The Government of India proposed the setting up of CEIT having international outreach for imparting ICT education in Papua New Guinea. The Ministry of External Affairs (MEA), Government of India, entrusted the responsibility for setting up of a CEIT at UPNG in Papua New Guinea- National Capital District, to Centre for Development of Advanced Computing (C-DAC).

CEIT is targeted to offer courses on basic IT education, intermediate and advanced level certificate courses as well as courses to bridge the gap between academia and industry.

CEIT offers latest courseware and reference books for training of Teachers, Students, Government Officials & Working Professionals.

Through its state-of-the-art training methodology, it will fulfill its objective of creating highly skilled IT resources and will be recognized by major corporate in Papua New Guinea. Majority of the students will get placed and shall acquire high positions in the industry. At one front, the Institute will assist Papua New Guinea to leapfrog into IT and at the other hand will bridge the digital divide of urban and rural students.

CEIT will produce value-added human capital for research & software development in Papua New Guinea. The quality of education at other higher learning institutions in the other region of Papua New Guinea will be improved by CEIT educated faculty & trained students

About C-DAC

Centre for Development of Advanced Computing (C-DAC) is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out R&D in IT, Electronics and associated areas.

C-DAC has today emerged as a premier R&D organization in IT&E (Information Technologies and Electronics) in the country working on strengthening national technological capabilities in the context of global developments in the field and responding to change in the market need in selected foundation areas.

As an institution for high-end Research and Development (R&D), C-DAC has been at the forefront of the Information Technology (IT) revolution, constantly building capacities in emerging/enabling technologies and innovating and leveraging its expertise, caliber, skill sets to develop and deploy IT products and solutions for different sectors of the economy, as per the mandate of its parent, the Ministry of Electronics and Information Technology, Ministry of Communications and Information Technology, Government of India and other stakeholders including funding agencies, collaborators, users and the market-place.

Advanced Computing Training School (ACTS)

CDAC had set up the Advanced Computing Training School (ACTS) as the top finishing school in IT training to meet the ever-increasing skilled manpower requirements of the IT industry as well as supplement its intellectual resource base for cutting edge R&D. Through its state-of-the-art training methodology, it is fulfilling its objective of creating highly skilled IT resources and recognized by major corporate in India to be a preferred high-end provider of skilled manpower in areas of ICT .

International Cooperation Division (ICD)

Over the years International Cooperation Division (ICD) CDAC Delhi has progressively grown to build an eco-system and institutional framework and acquired necessary expertise, strength and technical resources by implementing, supervising and managing large bi-lateral projects in developing countries. Till today CDAC-ICD Delhi has successfully implemented over 50 projects in Africa, East Europe, South-East Asia, Central Asia, Middle East, Arab, Latin America and Pacific Island Countries in close association with Ministry of External Affairs (MEA) and Ministry of Electronics & IT(MeitY), Government of India.

About UPNG

The University of Papua New Guinea (UPNG) is a university located in Port Moresby, capital of Papua New Guinea. It was established by ordinance of the Australian administration in 1965.
The UPNG offers various programs in Medicine, Pharmacy, Health Sciences, Physical and Natural Sciences, Law, Business, Humanities, Social Sciences, Sustainable Development fields.

Vision

The Vision of the University of Papua New Guinea is to be the Premier University dedicated to excellence and providing quality education, research, and service to Papua New Guinea and the Pacific.

Mission

The Mission of the University of Papua New Guinea is to deliver excellent education and research results for nation building and global advancement towards an innovative and empowered society.

Offered Courses

Certificate Courses

1. Certificate Course in Big Data Technologies
2. Certificate Course in Internet of Things
3. Certificate Course in Big Data Analytics
4. Certificate Course in Ethical Hacking & Information Security
5. Certificate Course in Android Programming
6. Certificate Course in Advanced Web Technology
7. Certificate Course in MS.Net
8. Certificate Course in Linux System Administration
9. Certificate Course in Software Testing
10. Certificate Course in Database Management
11. Certificate Course in Java Programming
12. Certificate Course in Network Security
13. Certificate Course in Network Administration
14. Certificate Course in Information Technology
15. Certificate Course in Multimedia Website Designing
16. Certificate Course in Office Automation
17. Certificate Course in Data Communication and Networking

PG Diploma Courses

1. PG–Diploma in Advanced Computing
2. PG–Diploma in IT Infrastructure, Systems and Security
3. PG–Diploma in Big Data Analytics
4. PG–Diploma in Artificial Intelligence

Certificate Course in Big Data Technologies

The objective of this course is to provide the student with an expertise in Big Data Technologies. This includes concepts and use of big data technologies along with concepts of Linux programming, Python programming, Data mining. After doing the course, the student will be able to use and provide various solutions using Big Data Technologies.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

The objective of Certificate Course in Big Data Technology (CCBDT) is to provide the student with an expertise Big data analytic domain. Analyze the big data using intelligent techniques. Applications using Map Reduce Concepts. After the completion of the course, students can work in Big Data hadoop, Map Reduce, HBase, Hive.

Course Content

SL No	Modules	Hours
1	Fundamentals of Linux programming	40
2	Python Programming	40
3	Database Concepts and Data Collection	40
4	Big Data Technologies	100
5	Effective Communication and Soft Skills	60
6	Project	40

Certificate Course in Internet of Things

Certificate Course in IoT aims to groom the students to enable them to work on technologies such as NodeJS and Python for development and embedded Linux to develop for IoT.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

Candidates will be trained in communication protocols, tolls like NodeJS and Python for development and embedded linux.
After the completion of the course, students can work as a Software Developer or Programmer /IT Support staff/ Trainee / Technical Support for the IoT based products and its associated service sectors.

Course Content

SL No	Modules	Hours
1	Fundamentals of IoT	30
2	IoT prototyping using NodeJS	30
3	Python Programming	30
4	Embedded Linux	35
5	Wireless Network	30
6	Communication models and IoT Protocols	30
7	Cloud Platforms for IoT	35
8	Management Development Program	60
9	Project	40

Certificate Course in Big Data Analytics

The objective of this course is to provide the student with hands on experience in Big Data Analytics.

Duration : 320 Hours

Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate

NSQF Level : 7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming, Database Technology and Java Programming.

Outcome

The objective of Certificate Course in BigData Analytics (CCBDA) is to provide the student with an expertise Big data analytic domain. Analyze the big data using Statistics with R, Data Visualization – Analysis and Reporting, Business Analytics. After the completion of the course, students can work in Statics with R, Data Visualization, Business Analytics.

Course Content

SL No	Modules	Hours
1	Big Data Fundamentals	30
2	Statics with R	90
3	Data Visualization – Analysis and Reporting	40
4	Business Analytics	60
5	Effective Communication and Soft Skills	60
6	Project	40

Certificate Course in Ethical Hacking & Information Security

This course is aimed to provide skills on security programming which will help the students who want to make a career in security domain.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Candidate should have knowledge of computer & networking fundamentals and Basic Computer Programming with OOPs concepts.

Outcome

This course is aimed to provide skills on security programming which will help the students who want to make a career in security domain as well as prepare them to keep pace with the changing face of technology and the requirements of the growing IT industry.
These candidates will be trained in Application Security, Ethical Hacking and Management skills. After the completion of the course, students can work in the area of Application Security or Ethical Hacking.

Course Content

SL No	Modules	Hours
1	Java Programming with Crypto API	80
2	Application Security	70
3	Ethical Hacking	70
4	Management Development Program	60
5	Project	40

Certificate Course in Android Programming

The objective of this course is to provide the student with an expertise in Android Programming. This includes Core Java and Mobile and Wireless Technologies modules. After doing the course, the student will be able to design, develop and maintain android applications effectively.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

The course aims to groom the students to enable them to work on current web technology scenarios as well as prepare them to keep pace with the changing face of technology and the requirements of the growing IT industry. These candidates will be trained in android Programming,Java Programming and Management skills. They can start career as software Android Developer/Web Developer/ Web Designer.

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer	20
2	Java Programming	70
3	Mobile and Wireless Technologies	20
4	Android Programming	110
5	Management Development Program	60
6	Project	40

Certificate Course in Advanced Web Technology

The objective of this course is to provide the student with an expertise in Website development.

Duration : 320 Hours

Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate

NSQF Level : 7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

The Certificate Course in Advanced Web Technology (CCAWT) course aims to groom the students to enable them to work on current web technology scenarios as well as prepare them to keep pace with the changing face of technology and the requirements of the growing IT industry. After the completion of the course, students can work as Web Developer / Web Designer / IT Support staff.

Course Content

SL No	Modules	Hours
1	Computer and Programming Concepts	40
2	Web Programming –1 (HTML,CSS,XML,Ajax)	70
3	Database Concepts	20
4	Web Programming –2 (PHP, Javascripts)	80
5	Internet Terminologies	20
6	Management Development Program	60
7	Project	40

Certificate Course in MS.Net

The objective of this course is to provide the student with an expertise in .Net Programming. This course familiarize with Microsoft.Net, C#, VB.NET and ASP.NET technologies.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

After doing the course, the student will be able to design, develop and maintain web-based enterprise applications effectively. The student will be able to understand the different concepts and features of .NET coding, debugging and developing of Windows and web applications.
After the completion of the course, students can work as a Software Developer or Programmer /IT Support staff/ Trainee / Technical Support and associated service sectors.

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer & OOPs Concepts	26
2	Software Development Life Cycle	12
3	Database Technologies	30
4	Foundations of Web Technologies	32
5	MS .Net Window programming	50
6	MS .Net Web based programming	70
7	Management Development Program	60
8	Project	40

Certificate Course in Linux System Administration

The objective of this course is to provide the student with an expertise in OS Administration.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Candidate should have basic knowledge of computer, Operating system and networking fundamentals with logical approach.

Outcome

These candidates will be trained in networking, System Administration and Linux Administration skills. Linux System administrators can work in a variety of industries, ranging from telecommunications to security exchanges. Jobs for Linux System administrators are expected to increase at an average rate over the next several years.
After the completion of the course, students can work as Linux Administrator/Operations Engineer/Site Reliability Engineer/Devops Engineer.

Course Content

SL No	Modules	Hours
1	Basic of Linux Administration	50
2	Fundamentals of Networking	40
3	System Administration	130
4	Management Development Program	60
5	Project	40

Certificate Course in Software Testing

The objective of this course is to provide skills to those students who want to make a career in Software Testing field.

Duration : 320 Hours Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate NSQF Level : 7

Course Prerequisite

Candidate should have basic knowledge of computer and networking fundamentals with logical approach.

Outcome

The Certificate Course in Software Testing (CCST) course this course is to provide essential knowledge of programming and expertise in Testing. Students who will complete this course can work in software testing.
These candidates will be trained in Software Testing – Manual & Automation and testing Management skills. They can start career as software Test Engineer /Tester/Quality engineer and move to Test lead.

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer & OS Concepts	20
2	C Programming	30
3	Software Development Life Cycle	10
4	OOP with C++ with DS	40
5	Database Technology	20
6	Software Testing – Manual	50
7	Software Testing – Automation	50
8	Management Development Program	60
9	Project	40

Certificate Course in Database Management

The objective of this course is to provide the student with an expertise in Database Administration.

Duration : 320 Hours Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate NSQF Level : 7

Course Prerequisite

Candidate should have basic knowledge of computer, Operating system and networking fundamentals with logical approach.

Outcome

These candidates will be trained in Database Technologies and Administration skills.
After the completion of the course, students can work as Database Administrator/Database Developer

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer and OS concepts	20
2	C Programming	40
3	Software Development Life Cycle	16
4	Database Technologies	80
5	Database Administration	64
6	Management Development Program	60
7	Project	40

Certificate Course in Java Programming

The objective of this course is to provide the student with an expertise in Java Programming. This includes both the Core Java and Advanced Java programming. After doing the course, the student will be able to design, develop and maintain web-based enterprise applications effectively.

Duration : 320 Hours

Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate

NSQF Level : 7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

Java is one of the most popular languages in the IT industry and many existing/upcoming technologies like android, hadoop uses java framework, which java assures demand for java professional in the IT market in the coming future.
After the completion of the course, students can work as a Software Developer or Programmer / IT Support staff / Trainee / Technical Support in associated service sectors.

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer and OOPS concepts	26
2	Software Development Life Cycle	12
3	Database Technologies	30
4	Foundations of Web Technologies	32
5	Core Java	50
6	Enterprise Java	70
7	Management Development Program	60
8	Project	40

Certificate Course in Network Security

The objective of this course is to provide skills to those students who want to make a career in Network defence and IT Infrastructure Management.

Duration : 320 Hours

Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate

NSQF Level : 7

Course Prerequisite

Candidate should have basic knowledge of computer and networking fundamentals with logical approach.

Outcome

The Certificate Course in Network Security (CCNS) course aimed to provide skills on networking and its maintenance and will help the students to make carrier in Network management.
After the completion of the course, students can work as Network Administrator/Operations Engineer/Site Reliability Engineer/security Engineer/ IT Infrastructure Engineer/Information Security Assurance.

Course Content

SL No	Modules	Hours
1	Network Fundamentals	40
2	Network Defense and Countermeasures	100
3	IT Infrastructure Management	80
4	Management Development Program	60
5	Project	40

Certificate Course in Network Administration

This course is aimed to provide skills on networking and its maintenance and will help the students to make a career in Network management.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Candidate should have basic knowledge of computer, Operating system and networking fundamentals with logical approach.

Outcome

These candidates will be trained in networking, Network Administration and Network Defense & Countermeasures skills. Network administrators can work in a variety of industries, ranging from telecommunications to security exchanges.
After the completion of the course, students can work as System Administrator / Network Administrator / Network Support in associated service sectors.

Course Content

SL No	Modules	Hours
1	Fundamentals of Networking	40
2	Network Administration	100
3	Network Defense and Countermeasures	80
4	Management Development Program	60
5	Project	40

Certificate Course in Information Technology

The objective of this course is to enable the student to understand office Automation tools, PC and Networking concepts.

Duration	:	180 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Basic Computer Fundamentals

Outcome

The Certificate Course in Information Technology provides essential knowledge on how to work in office automation Tools and networking.

Course Content

SL No	Modules	Hours
1	Computer Fundamentals	20
2	Selecting Components and Preparing PC	32
3	Office Automation Tools	60
4	Database Concepts and MS Access	14
5	Communication using PC	18
6	Overview of Networking	36

Certificate Course in Office Automation

The objective of this course is to enable the student to understand the Operating System and office Automation tools.

Duration : 144 Hours

Fee : PKG ---

Eligibility : Minimum of Grade 12 Certificate

NSQF Level : 7

Course Prerequisite

Sound knowledge of Basic Computer Fundamentals

Outcome

The Certificate Course in Office Automation provides essential knowledge on how to work in office automation Tools and client operating systems.

Course Content

SL No	Modules	Hours
1	Computer Fundamentals	14
2	Client Operating System (Windows 10, Ubuntu)	20
3	Database Concepts	30
4	MS Office 2016	60
5	Database Management using MS access	20

Certificate Course in Multimedia Website Designing

The objective of this course is to provide knowledge to the participants who complete this course and to make a career in web designing & Animation activities.

Duration	:	320 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

These candidates will be trained in Flash Animation, Scripting and UI Designing skills.Website Designer can work in a variety of industries, ranging from telecommunications to security exchanges.
After the completion of the course, students can work as Website Designer in associated service sectors.

Course Content

SL No	Modules	Hours
1	Introduction to Computers	20
2	HTML Scripting	80
3	UI Designing	40
4	Interactive Flash Animation	80
5	Management Development Program	60
6	Project	40

Certificate Course in Data Communication and Networking

The objective of this course is to enable the student to understand the basic networking concepts, design a local area network and supervise the physical implementation of the same.

Duration	:	144 Hours	Fee	:	PKG ---
Eligibility	:	Minimum of Grade 12 Certificate	NSQF Level	:	7

Course Prerequisite

Basic understanding on peripheral devices,computer hardware and software, memory, storage devices, some common PC utilities, Internet concepts

Outcome

Student should be able to perform all administrative operations on a Local Area Network independently, including configuring software in the Windows environment, connecting and configuring peripherals such as printers, scanners etc., granting and restricting access to the network and the internet through a proxy server.

Course Content

SL No	Modules	Hours
1	Introduction to Networking	26
2	Windows Server 2016	54
3	Introduction to Linux OS administration and configuration	48
4	Configuration of Routers and Switches using Simulation Tool	16

PG–Diploma in Advanced Computing

The course is targeted towards engineers and IT professionals who wish to venture into the domain of advanced computing. This course covers domain of MEAN Stack, Java and MS NET development.

Duration	:	900 Hours	Fee	:	PKG ---
Eligibility	:	Graduate in Computer Science, Information Technology, Applied Physics, Communication Engineering	NSQF Level	:	8

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

After completion of course students will be able to acquire the following skills:

- Use technologies to access and interpret information effectively.
- Apply their analytical skills to investigate unfamiliar problems Web technologies like HTML 5.0, CSS, Java Script, Jquery, Angular JS,
- Use quantitative data confidently and competently,
- Use communication technologies competently.
- Understand the multi–tier architecture of web–based enterprise applications using. Enterprise JavaBeans. Integrate Servlets, JSPs with EJB and Databases in J2EE application.
- Understand .net architecture, develop and maintain the application.

After doing this course students can work as Software Engineer / Developer / Database designer. Candidate can mentor team and sole responsible for team work. Student will be able to use software engineering principles.

Course Content

SL No	Modules	Hours
1	OOPs with C++ Programming	60
2	Algorithm & Data Structures	70
3	Advanced Software Development Methodologies	90
4	Operating Systems Concepts	60
5	Advanced Web Programming	50
6	MEAN Stack	60
7	Database Technologies	60
8	Java Technologies–I (Core Java)	70
9	Java Technologies–II (Web Based Java)	90
10	Microsoft.Net Technologies	70
11	Effective Communication	50
12	Aptitude & General English	50
13	Project	120

PG–Diploma in IT Infrastructure, Systems and Security

The course explores the fundamental concepts of Cyber Security, Ethical Hacking, Data Centre Management and cloud computing, accessing resources and services needed to perform functions with dynamically changing needs.

Duration	:	900 Hours	Fee	:	PKG ---
Eligibility	:	Graduate in Engineering, Electronics/ Computer Science/ IT or related areas	NSQF Level	:	8

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

Students will be trained to analyze threats detection techniques, in–depth knowledge and understanding in the Intrusion Detection and Prevention domain. , applications security implementation and various cloud platforms to implement real time cloud applications.

- To analyze and solve problems conceptually and practically from diverse industries, such as government, manufacturing, retail, education, banking/ finance, healthcare and pharmaceutical.
- To use advanced tools/ decision–making tools/ techniques to analyze the complex problems and get ready to develop such new techniques for the future.
- To use cloud computing, accessing resources and services needed to perform functions with dynamically changing needs.
- To use the cloud privacy and security concepts to create secure cloud environment.
- To develop industrial research projects for the development of future solutions in the domain of Information Security to make an impact in the technological advancement.

They can start a career as a System Administrator, Network Security Professional, Web Security Tester or Information Security Analysts.

Course Content

SL No	Modules	Hours
1	Fundamentals of Computer Networks	80
2	Concepts of Operating System and Administration	210
3	Security Concepts	170
4	Network Defense and Countermeasures (NDC)	70
5	Cyber Forensics	30
6	PKI	50
7	IT Infrastructure Management	90
8	Effective Communication	50
9	Aptitude & General English	50
10	Project	100

PG–Diploma in Big Data Analytics

The course explores the fundamental concepts of big data analytics, visualization techniques, and hands on advanced analytical tools/ decision–making tools/ operation research techniques to analyze the complex problems.

Duration	:	900 Hours	Fee	:	PKG ---
Eligibility	:	Graduate in Engineering/IT/Computer Science/ Electronics / Telecommunications Electrical / Instrumentation	NSQF Level	:	8

Course Prerequisite

Sound knowledge of Computing Fundamentals and Fundamentals of Programming.

Outcome

After completing this course students shall be expert in following things: Big Data tools, Big Data Querying Tools such as Pig, Hive and Impala, park.

- Integration of data from multiple data sources
- NoSQL databases, such as Hbase, MongoDB
- Knowledge of various ETL techniques and Implementing ETL Process Monitoring performance and advising any necessary infrastructure changes
- Developing reports, dashboards using D3 & Tableau
- Understanding on the applications using Map Reduce Concepts

Student can start a career as a big Data Developer/Business Analyst.

Course Content

SL No	Modules	Hours
1	Linux Programming and Cloud Computing	80
2	Python Programming and Advanced Analytics	90
3	Object Oriented Programming with Java 8	80
4	Statistical Analysis with R	70
5	Data Collection & DBMS Principles, Tools & Platforms	40
6	Big Data Technologies	130
7	Data Visualization – Analysis and Reporting	40
8	Practical Machine Learning	100
9	Effective Communication	50
10	Aptitude & General English	50
11	Project	100

PG–Diploma in Artificial Intelligence

This course will focus on AI platform, framework, infrastructure and AI based services and will give enough opportunities to the learner for business modeling, solution development, architecting automated applications, data science, coding etc

Duration	:	900 Hours	Fee	:	PKG ---
Eligibility	:	Graduate in Engineering/IT/Computer Science/ Electronics / Telecommunications Electrical / Instrumentation	NSQF Level	:	8

Course Prerequisite

Graduate in Engineering/ IT/ Computer Science / Electronics / Telecommunications / Electrical / Instrumentation

Outcome

PG Diploma in Artificial Intelligence (PG–DAI) comprehensive programme that combines Data Science, Machine Learning and Deep Learning to prepare candidates for the roles of Applied AI Scientists, Applied AI engineers, AI architects, Technology architects, Solution Engineers, Technology Consultants.

Course Content

SL No	Modules	Hours
1	Fundamental of Artificial Intelligence	80
2	Advanced Programming using R & Python	120
3	Mathematics & Statistics for Artificial Intelligence	80
4	Machine Learning	100
5	Data Analytics	80
6	Reinforcement Learning	50
7	Deep Neural Networks	70
8	Natural Language Processing & Machine Vision	60
9	AI Compute Platforms, Applications & Trends	40
10	Effective Communication	50
11	Aptitude & General English	50
12	Project	120

Contact Us

Why CEIT

The Industrial valued certificates will be issued in association with UPNG and CDAC to the students

Trending Courses : **Certificate Courses** in Big Data, Ethical Hacking, Internet Of Things, Advanced Web Development, MS.Net, Linux System Administration, Android Development, Networking & Security…….etc. **PG Diploma Courses** in BigData, Advanced Computing, IT Infrastructure System & Security and Artificial Intelligence.

Certified Trainers : The Trainers are certified from C-DAC various PG-Diploma programs

Smart Classes and Labs: Fully functional training labs with modern facilities viz. Desktop Computers, Laptops, Printers, Softwares, Smart Board, Video Conferencing, TV, Projection System, Student Feedback Response System, Library, etc. to enhance the learning environment.

How to apply:

Visit www.ceit.upng.ac.pg
Click on Enroll Button to fill out the form

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