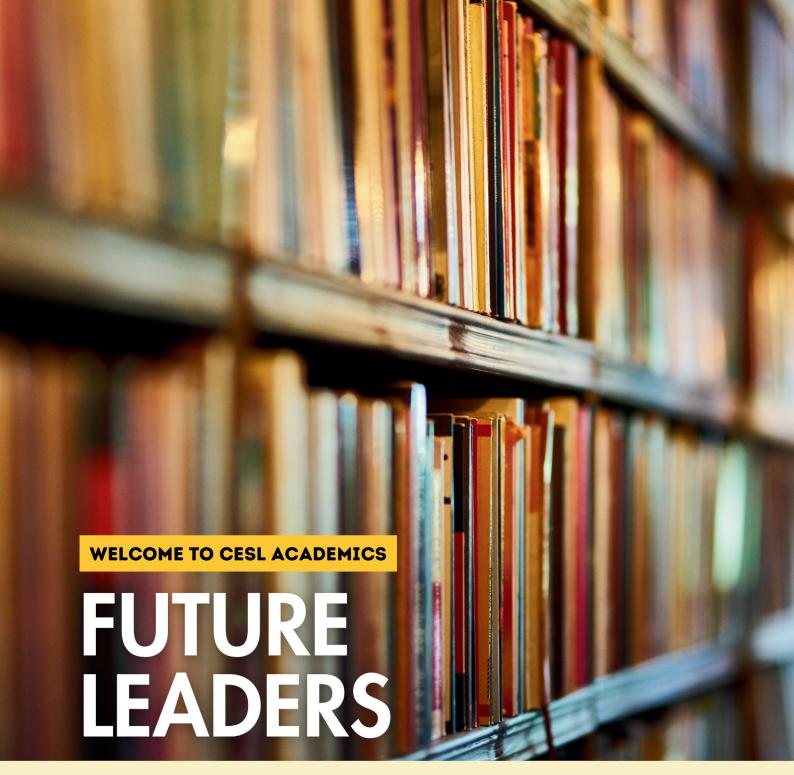


# Engineering

Unleashing the Potential of Tomorrow's Technology



# ARE MADE HERE.

CESL ACADEMICS is a business and technology-oriented, teaching-focused institution in India that offers executive programs and nano degrees to both domestic and international students.

CESL Academics is a dynamic and developing institution distinguished by strong connections to the business world and a dedication to providing exceptional student services.

We provide students with the most innovative, dynamic, and practical learning environment possible. Join us and you could become a member of our world-class learning community.

Our great education, professional practice, and profound connections within the business and technological communities will transform you into a graduate with leadership and technical skills.

#### **ACCREDITATIONS**

#### **OUR QUALITY STANDARDS**

Accreditations, memberships and designations are important because they externally validate the quality of the education provided. The following organisations have recognised CESL Academics for its high-quality education:









#### **PROGRAMS**

#### **NANO DEGREE**

The nature of CESL Academics nanodegree programs allows them to cover a variety of technology stacks, with the key components of each technology focusing on relevant job profiles. Sometimes, you won't discover comprehensive information on technology; instead, you'll get just enough to get you started using the tools that will help you find work.

#### **EXECUTIVE PROGRAM**

The Executive Programme from CESL Academics is designed for graduates and professionals from diverse fields where you can earn certification and alumni status upon completion. Our program offers a comprehensive curriculum that covers 70+ programming tools and languages. You can choose 3 specializations based on your background and career aspirations, to consider it as a Nanodegree

#### **HELPFUL RESOURCES**

#### **TOOLS FOR YOUR SUCCESS**

To Deliver High quality projects In Nano degree & Executive program, Latest software's are utilized to make learning more efficient & effective.



















































# DATA SCIENCE & ANALYTICS



"Unlock the power of data with our comprehensive Data Science and Analytics training program."

Our data science and analytics training program will equip you with the latest tools and techniques to make sense of complex data sets and make informed business decisions.

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- Programing in Python and SQL for data analysis.
- how to manage and clean up dirty data.
- how to test hypotheses using applied statistics
- how to create data visualizations.

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### **DELIVERY**

On Campus

#### Why should I enroll?

In the coming years, the data science field will keep growing rapidly, creating a high demand for data scientists in various sectors. Being a data scientist is consistently ranked as a top career choice. To boost your data science career, CESL Academics has partnered with industry experts to offer an exceptional learning journey. You'll gain hands-on experience building recommendation systems, creating experiments, and handling data pipelines.

### What is the difference between the Data Analyst, Machine Learning Engineer, and the Data Scientist Nanodegree programs?

People with some programming expertise but little to no data analysis skills should apply for the Data Analyst program. Students will learn how to utilize Python and SQL for data analysis, how to manage and clean up dirty data, how to test hypotheses using applied statistics, and how to make data visualizations. The program's graduates will be qualified for jobs as data analysts.

As the next step for graduates of the Data Analyst Nanodegree program, the Data Scientist Nanodegree program is intended for students with strong programming and data analysis abilities. Students will gain knowledge of how to create machine learning models, manage data pipelines, create experiments and recommendation engines, communicate clearly, and implement data applications. The program's graduates will be qualified for jobs as data scientists.

Students who enroll in the Machine Learning Engineer Nanodegree program are prepared for professions in machine learning engineering. Each of these two programs begins with a focus on machine learning since careers in both fields begin with "data scientist" or "machine learning," and both require understanding of that field. As you start to concentrate on more profession-specific tools, skills, and procedures, the curriculum diverges in later portions.



#### **NANO DEGREE PROGRAM**

Python Programming for Data Science: From Fundamentals to Advanced Analysis

Advanced Business Analytics

Nanodegree in Data Science

Strategic Data Product Management

Nanodegree in Data Architecture: Designing, Implementing, and Managing Data Ecosystems

Nanodegree in Real-time Data Streaming: Techniques and Applications

Nanodegree in Complex Data Wrangling: Advanced Techniques for Effective Data Manipulation and Transformation

- Analyze SE Data
- SQL for Data Analysis
- Data Visualization with Tableau
- · Introduction to SQL
- Introduction to Python Programming
- Introduction to Version Control
- Software Engineering for Data Scientists
- Data Engineering for Data Scientists
- Experiment Design and Recommendations
- Applying Data Science to Product Management
- · Establishing Data Infrastructure
- · Leveraging Data in Iterative Product Design
- · Designing Data Systems
- · Big Data Systems
- Data Governance
- · Foundations of Data Streaming
- Streaming API Development & Documentation
- Foundations of Data Engineering
- Unveiling Patterns and Knowledge through Small Data Analysis
- · Executive degree in Big Data Analytics
- Strategies for Effective Data Management and Compliance
- Executive degree in Spark and Data Lakes:
   Big Data Processing and Storage for Modern Analytics
- Introduction to Data Analysis with Pandas and NumPy
- Advanced Data Wrangling
- Data Visualization with Matplotlib and Seaborn
- Executive degree in Data Visualization: Matplotlib and Seaborn Unleashed

# ARTIFICAL INTELEGENCE & MACHINE LEARNING

"Artificial intelligence and machine learning are transforming the world we live in, from autonomous cars to personalized healthcare, and have the potential to solve some of society's biggest challenges."

- Sundar Pichai, CEO

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- Basic knowledge of linear algebra and calculus.
- The ability to apply basic probability and statistics.
- Programming experience in Python.

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### **DELIVERY**

On Campus

#### Why should I enroll in this program?

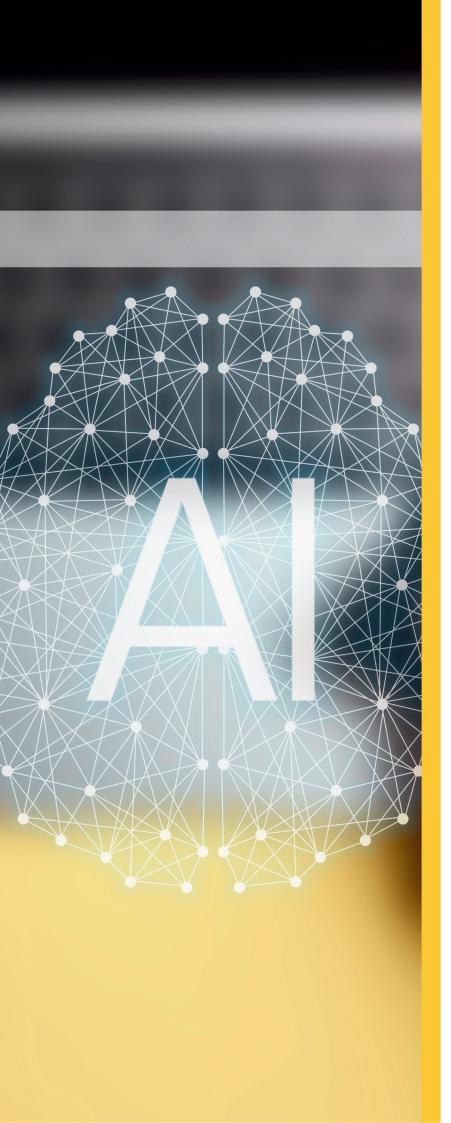
The world-class curriculum for the Artificial Intelligence Nanodegree program was created by CESL in cooperation with leading industry firms. It is taught by industry experts. The curriculum can help you realize your full potential as an artificial intelligence or machine learning engineer by providing a thorough introduction to the discipline. This is a great curriculum for you if you're prepared for an efficient and effective immersion into the realm of artificial intelligence with the intention of exploring new chances in the industry.

#### How do I know if this program is right for me?

You will learn from the top AI researchers in the world in this Nanodegree program, and you'll gain a thorough understanding of the algorithms that are used to solve issues in areas like Natural Language Processing, Computer Vision, Bioinformatics, and others. This curriculum is excellent if your objective is to become an expert in artificial intelligence because it teaches you some of the field's most crucial algorithms. When you complete the program, you'll be well-equipped to grow in your area thanks to the systematic strategy provided for applying these strategies to novel problems.

This curriculum is perfect for you if you want to become an expert in natural language processing (NLP). You will master the key NLP techniques, such as speech recognition, sentiment analysis, and machine translation, during the course of this study. The most recent probabilistic and deep learning models will be taught to you, along with how to code them, train them using actual data, and create an NLP portfolio that is ready for the job market!

With AI and ML, machines can learn, reason, and adapt like humans, leading to incredible advancements in fields from healthcare to finance.



#### **NANO DEGREE PROGRAM**

Machine Learning Dev Ops Engineer

Al Product Manager

Intro-to-machine-learning

Artificial Intelligence

- Building a Reproducible Model Workflow
- Deploying a Scalable ML Pipeline in Production
- Automated Model Scoring & Monitoring
- · Create a Dataset
- Building a Al Model
- Measuring Impact & Updating Models
- Supervised Learning
- Introduction to Neural Networks with PyTorch
- Unsupervised Learning
- · Unsupervised Learning
- Ethical AI
- · Communicating with Natural Language
- · Fundamentals of Al
- · Applications of Al

# **CYBER SECURITY**



"If you spend more on coffee than on IT security, you will be hacked."

- Richard Clarke

Our adaptive training platform uses the latest techniques to prepare your team to defend against phishing, malware, and the latest cyber attacks.

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- Cybersecurity Foundations
- Defending and Securing Systems
- Threats, Vulnerabilities, and Incident Response
- Governance, Risk, and Compliance.

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### **DELIVERY**

On Campus

#### Why should I enroll?

Given the prevalence of data breaches (more than 3.2 million records were exposed in the 10 greatest data breaches in the first half of 2020 alone), cybersecurity is a crucial area for firms in every industry. Businesses are scrambling to hire for cybersecurity roles to lower risk and increase security, but by 2025 there are expected to be 4.5 million cybersecurity jobs that are unfilled. You may enter this highly sought-after sector with the core skills you learn in the Introduction to Cybersecurity Nanodegree program.

Graduates of this program will be able to:

- Assess the specific security procedures utilized to manage a system that complies with fundamental controls and industry standards.
- Describe the procedures for establishing and preserving a network's, computing environment's, and application's security.
- Use control approaches to safeguard operating systems, applications, and network infrastructure.
- Perform threat analyses and vulnerability scans to protect an organization's assets.

#### How do I know if this program is right for me?

Anyone interested in developing foundational knowledge and abilities in cybersecurity, such as system and network security, threat assessment, and incident response, should definitely consider this program. The Introduction to Cybersecurity Nanodegree program is for you if you're interested in starting a career in cybersecurity or simply want to deepen your knowledge of fundamental cybersecurity concepts.



#### **NANO DEGREE PROGRAM**

Security Architect
Privacy Engineer
Security Engineer
Ethical Hacker
Cybersecurity

- Enterprise Identity & Access Control
- Infrastructure & Network Security Architecture Planning & Design
- Incident Response & Business Continuity Architecture Planning, Design & Implementation
- · Data Privacy
- Privacy Engineering for User-Facing Software Applications
- · Organizational Privacy Engineering
- · Cybersecurity for Business Leaders
- · Zero Trust Security
- · System Security
- Infrastructure Security
- · Application Security
- · Intro to Ethical Hacking
- Penetration Testing and Red Teaming Operations
- Cybersecurity Foundations
- Threats, Vulnerabilities, and Incident Response
- Governance, Risk, and Compliance

# CLOUD COMPUTING



"Cloud is the digital wonderland of Internet of Things, powered by Artificial Intelligence and Big Data"

- Richard Clarke

Gain the in-demand skills to launch your tech career through expert-led training and real-world projects.

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- Cloud Fundamentals
- Full Stack Apps on AWS
- Monolith to Microservices at Scale
- Develop and Deploy a Serverless App

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### **DELIVERY**

On Campus

#### Why should I enroll?

There is a tremendous demand for cloud developers across businesses, and the industry is anticipated to continue expanding quickly over the coming years. You can boost your software development career by taking advantage of the top-notch learning opportunity that CESL has created in partnership with business experts. You will gain practical experience creating and deploying full stack applications, splitting up large projects into smaller ones, creating serverless applications for the cloud, and more. As you develop in-demand skills that will make you eligible for high-paying employment in the cloud computing industry and help you find a job you love, Udacity offers excellent support. You will have an amazing portfolio of real-world projects and priceless practical experience by the time the Nanodegree program is over.

The Cloud Computing field is expected to continue growing rapidly over the next several years, and there's huge demand for DevOps engineer across industries. You'll get hands-on experience building CI/CD pipelines, deploying infrastructure using code, implementing configuration management using Ansible, deploying microservices at scale, and more. You'll have personalized support as you master in-demand skills that qualify you for high-value jobs in the cloud computing field.

#### How do I know if this program is right for me?

For seasoned software/web engineers looking to further their careers, our Nanodegree program offers the perfect route. This is an excellent approach to gain practical experience with a range of cloud computing principles and best practices if you enjoy designing web applications and want to learn how to create them on the cloud.



#### NANO DEGREE PROGRAM

Cloud Developer

- Small Data
- Big Data
- Cloud Data Warehouses
- Develop & Deploy Serverless Apps
- Cloud Fundamentals
- Full Stack Apps on AWS
- Develop & Deploy Serverless App

# CODING ESSENTIALS



You might not think that programmers are artists, but programming is an extremely creative profession. It's logic-based creativity.

- John Romero

Intro to Programming is your first step towards careers in Web and App Development, Machine Learning, Data Science, AI, and more! This program is perfect for beginners.

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- Intro to Web Development
- Intro to Programming with Python
- Intro to JavaScript
- Object-Oriented Programming (OOP)

#### Why should I enroll?

A rising number of professions can benefit from your knowledge of coding. You'll need a solid basis, and in this program, you'll establish a solid foundation in fundamental programming ideas, whether your career goals are to become an artificial intelligence engineer, a web developer, or simply to utilize programming to further your present one. No prior coding knowledge is required to enroll, and we've thoroughly tested the lessons with novice students to make sure they're clear, interesting, and useful.

High-performance, compiled C++ is a language. C++ is used because of its speed in embedded software, cars, and robots. The goal of this program is to transform software engineers into C++ programmers. C++ is the language you'll use to create object-oriented programs, control memory and system resources, and carry out parallel programming.

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### How do I know if this program is right for me?

This curriculum gives the ideal place to begin learning to code if you have little to no experience. If you're a competent intermediate programmer who is familiar with functions and classes and who wishes to work in the fields of robotics software, IoT, mobile communications, video game development, operating systems, networking, AI, embedded systems, and more, this program is for you.

This program is right for you if you're an intermediate-level programmer familiar with functions and classes who wants to become a C++ developer or pursue a career in robotics software, IoT, mobile communications, video game development, operating systems, networking, AI, embedded systems, and more.

#### **DELIVERY**

On Campus

```
ards();});
resize, function
  $(window).widt
smallscreen();
  gscreen();
rds smallscreen()
```

#### **NANO DEGREE PROGRAM**

Reactnd

Intermediate JavaScript

Introduction to Programming

- React Fundamentals
- React & Redux
- React Native
- Object Oriented JavaScript
- Functional Programming
- · Asynchronous Programming in JavaScript
- Intro to JavaScript
- Intro to Python
- Intro to JavaScript
- · Intro to CSS

## OTHER TECHNOLOGIES



A programming language is for thinking about programs, not for expressing programs you've already thought of. It should be a pencil, not a pen.

- Paul Graham

Intro to Programming is your first step towards careers in Web and App Development, Machine Learning, Data Science, AI, and more! This program is perfect for beginners.

#### **KEY FACTS**

#### **TAKEAWAYS**

Students will learn.

- SQL and Data Modeling for the Web
- API Development and Documentation
- Identity Access Management
- Server Deployment and Containerization)

#### Why should I enroll?

There is a much greater need than supply for engineers with reinforcement learning and deep learning expertise. You have a special opportunity to acquire these in-demand skills through this program. You'll use a combination of Python and deep learning libraries to develop a number of deep reinforcement learning algorithms that will be used as examples in your portfolio to show off your abilities. You'll be in a prime position to emerge as a leader in this ground-breaking industry as interest and investment in this area keep rising.

Front end web developers are in high demand across all sectors of the economy. You will be qualified for positions at a variety of businesses, from start-ups to large corporations, by mastering the essential skills taught in this program.

#### **DURATION**

Nano Degree Program ranges from 50 hours to 60 hours.

Executive Program ranges from 15 hours to 30 hours.

#### How do I know if this program is right for me?

A perfect entry point into the realm of deep reinforcement learning is provided by this curriculum. Deep reinforcement learning is a gamechanging technology that is redefining our future and inspiring incredible new advancements in artificial intelligence. This is the ideal place to start if you're interested in using AI in industries like gaming, robotics, autonomous systems, and financial trading.

Companies turn to you as a Full Stack Web Developer to create, support, and manage their web applications. Full stack web developers are needed by almost every organization, regardless of the platform. This curriculum is the perfect place to start if you're interested in developing the infrastructure that supports and drives the numerous web, desktop, mobile, and integrated apps found worldwide.

#### DELIVERY

On Campus



#### **NANO DEGREE PROGRAM**

Deep Reinforcement Learning

Blockchain Developer

Agile Software Development

Full Stack Web Developer

Java Web Developer

- · Foundations of Reinforcement Learning
- Policy-Based Methods
- Multi-Agent Reinforcement Learning
- Blockchain Fundamentals
- · Blockchain Architecture
- Dapp with Autonomous Smart Contracts & Oracles
- Foundations of Agile & Agile Frameworks
- Delivering Value with Agile Planning and Prioritization
- Progress, Communication & Organizational Agility
- · Introduction to SQL
- Building a Reproducible Model Workflow
- Building Generative Adversarial Networks
- Internet of Things (IOT)
- API Development and Documentation
- Server Containerization and Deployment
- · SQL and data Modelling for the Web
- Data Stores and Persistence
- · Web Services and APIs
- Security and DevOps



#### **HEADQUATERS - CHENNAI**

62/2B, New No. 99, Old No. 144, Poonamalle Taluk, Padur, Tamil Nadu 602105

Name: Anish Kumar. R Phone: 9176869708

Email: academics@ceslindia.com

#### **BRANCH OFFICE - BENGALURU**

Prestige Atlanta, 80 Feet Rd, Koramangala 1A Block, Koramangala 3 Block, Koramangala, Bengaluru, Karnataka 560034

Name: Jerome Anthony. A Phone: 9566286633

Email: academics@ceslindia.com

#### **BRANCH OFFICE - DELHI**

530, C -Block, P-5, NPX Tower, Sector -153, Noida-201310.

Name: Vinayandra Tiwari Phone: 8800896266

Email: academics@ceslindia.com



FOR ENQUIRY
SCAN THE QR CODE OR VISIT
FORMS.GLE/BUQ9ABBQWXWOL2APA

#### **FOLLOWS US**

@cesltraining

@cesl\_training

@CeslTraining

@cesltraining6168

@cesl-training

cesltraining.com