

---

# Online Software Courses

## For High Paying Jobs in Software

---



Amit Patel - 6 February 2020

**Affiliate Disclaimer :** I want to disclose that the links to courses in this report will *earn me an affiliate commission* when you invest in any certification. The cost or quality of the course will not change for you in any respect. It is similar to when you buy a car. When you buy a car in your city, you are buying it from a local agent, who gets a commission on your purchase of that car. My goal with this report is to help you double your income potential by suggesting the best online courses available today. Most of my material is free to use, but to keep all the information I share with you free, *I need a steady stream of income*. So I find the best online courses for software engineer that are affordable and have the capability to give you an advantage to double your income or get promoted within a short time. Having said that, there are millions of online courses and platforms on the web that relate to learning the latest technology. I only promote those courses that I have investigated and truly feel deliver value to you. Please note that *I have not been given any free products, services or anything else by these companies* in exchange for mentioning them on the site. The only consideration is in the form of affiliate commissions. If you have any questions regarding the above, please do not hesitate to contact me by using the contact page on **My Youtube channel**.

---

---

# Table of Contents

<b>Table of Contents</b>	<b>2</b>
<b>1. Introduction</b>	<b>5</b>
<b>2. Why we need this?</b>	<b>7</b>
<b>3. Courses For: Highest Paying Jobs</b>	<b>9</b>
<b>1. Full Stack Development</b>	<b>9</b>
1.1.Full-Stack Web Development with React : View Syllabus	9
1.2.Web Application Development: Basic Concepts : View Syllabus	9
1.3.Web Applications for Everybody : View Syllabus	9
1.4.Python 3 Basics : View Syllabus	10
1.5.Python for Everybody Specialization : View Syllabus	10
1.6.Python 3 Programming Advanced : View Syllabus	10
1.7.Object Oriented Programming in Java : View Syllabus	10
1.8.Become a Full Stack .NET Developer (Beginner) : View Syllabus	11
1.9.Become a Full Stack .NET Developer (Advanced) : View Syllabus	11
<b>2. Application Programming Interface</b>	<b>11</b>
2.1.Software Design and Architecture : View Syllabus	11
2.2.Developing APIs with Google Cloud's Apigee API Platform : View Syllabus	11
2.3.Service-Oriented Architecture : View Syllabus	12
2.4.API Development in ASP.NET Core : View Syllabus	12
2.5.AWS Fundamentals: Building Serverless Applications : View Syllabus	12
2.6.RESTful Web APIs with Spring : View Syllabus	13
<b>3. Business Process Management</b>	<b>13</b>
3.1.Business Process Management in Healthcare Organizations : View Syllabus	13
3.2.Business Analysis - CBAP : View Syllabus	14
3.3.Leadership and Management for Project Managers : View Syllabus	14
<b>4. Cybersecurity</b>	<b>14</b>
4.1.Introduction to Cyber Security : View Syllabus	14
4.2.Cybersecurity : View Syllabus	15
4.3.Security Fundamentals : View Syllabus	15
4.4.Security Engineering : View Syllabus	15

---

<b>5. Legacy Modernisation</b>	<b>15</b>
5.1. Software Product Management : View Syllabus	16
5.2. Software Development Lifecycle : View Syllabus	16
5.3. Domain-Driven Design: Working with Legacy Projects : View Syllabus	16
<b>6. Enterprise Cloud</b>	<b>17</b>
6.1. Architecting with Google Compute Engine : View Syllabus	17
6.2. Cloud Computing : View Syllabus	17
6.3. Developing Applications with Google Cloud Platform : View Syllabus	17
6.4. AWS Fundamentals: Going Cloud-Native : View Syllabus	18
6.5. AWS Fundamentals: Building Serverless Applications : View Syllabus	18
6.6. AWS Fundamentals: Migrating to the Cloud : View Syllabus	19
6.7. .NET Developer on Microsoft Azure : View Syllabus	19
6.8. Google: Professional Cloud Data Engineer : View Syllabus	19
<b>7. Big Data and Data Science</b>	<b>19</b>
7.1. Big Data Specialization : View Syllabus	20
7.2. Data Engineering, Big Data, and Machine Learning : View Syllabus	20
7.3. Modern Big Data Analysis with SQL : View Syllabus	21
7.4. The Data Scientist's Toolbox View Syllabus	21
7.5. Introduction to Data Science View Syllabus	21
7.6. AWS Big Data : View Syllabus	22
7.7. Google: Professional Cloud Data Engineer : View Syllabus	22
<b>8. DevOps</b>	<b>22</b>
8.1. DevOps Culture and Mindset : View Syllabus	22
8.2. Continuous Delivery & DevOps : View Syllabus	23
8.3. Architecting with Google Compute Engine : View Syllabus	23
<b>9. IT Automation</b>	<b>24</b>
9.1. Google IT Automation with Python : View Syllabus	24
<b>10. Enterprise Service Management</b>	<b>24</b>
<b>11. Internet of Things</b>	<b>24</b>
<b>12. Enterprise Learning Management</b>	<b>24</b>
<b>13. Robotic Process Automation</b>	<b>24</b>
<b>14. Artificial Intelligence &amp; Machine Learning</b>	<b>24</b>

---

---

14.1.Applied Data Science with Python Specialization View Syllabus	24
14.2.Machine Learning Specialization View Syllabus	25
14.3.Data Science: Foundations using R View Syllabus	25
14.4.Data Science: Statistics and Machine Learning View Syllabus	25
14.5.Deep Learning View Syllabus	26
14.6.Advanced Machine Learning Specialization View Syllabus	26
<b>15. Digital Marketing</b>	<b>27</b>
<b>16. Digital Product Engineering</b>	<b>27</b>
<b>17. Omni Channel Marketing</b>	<b>27</b>
<b>18. Content Personalisation</b>	<b>27</b>
<b>19. 3D Printing</b>	<b>27</b>
<b>20. Augmented Reality</b>	<b>27</b>
<b>21. Blockchain</b>	<b>27</b>
<b>22. Drones</b>	<b>27</b>

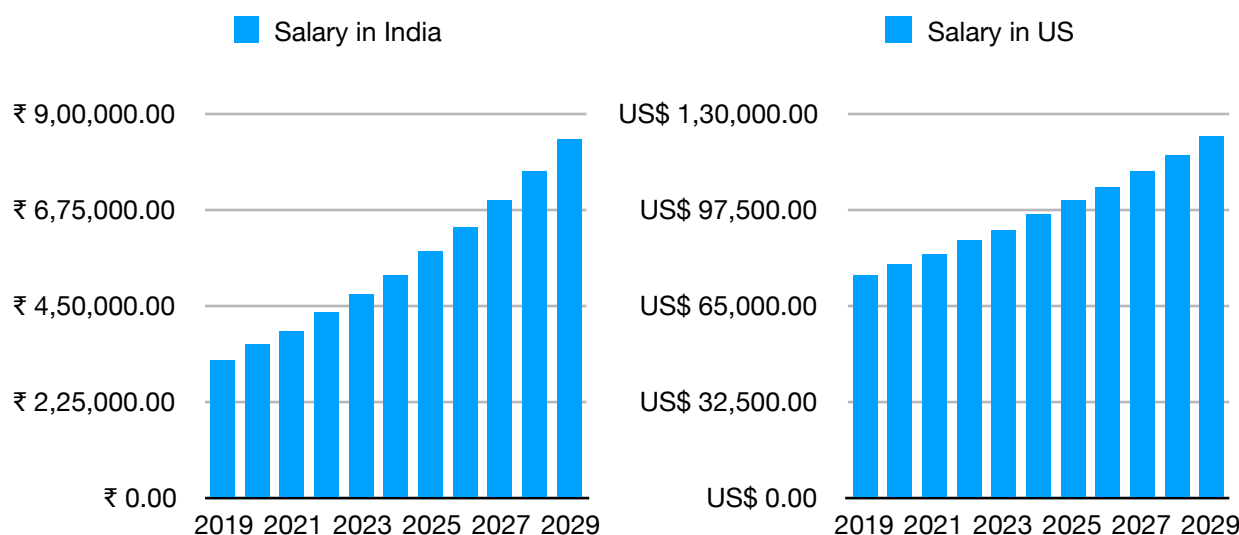
---

# 1. Introduction

Do you know that, salaries in software industry have remained stagnant for almost a decade now. The average salary of a software engineer has not increased in the last 10 years and in fact in some cases it has gone down for common technologies like .NET & Java because of a huge supply.

The idea here is to help you upgrade your skills so that your income can change. To put it correctly you will start earning a high salary in a short period of time.

I have a vision where any software engineer can transform their life by investing in education from the worlds best online learning platform.



In this report I reveal a few courses based on my experience in the software industry combined with my research of several months.

Here you will find courses, specializations, certificates, masters and degrees that you can complete online from anywhere you want. You can do these part time along with your full time job.

The courses are designed so that you can complete within 4 to 6 weeks. But the specialisation will take time depending on the number of courses you have to complete for the specialisation.

Moreover, you can get a certificate and access to projects when you pay a small fee towards the course. This certificate is recognised by the software industry.

---

If you have the desire to find the highest paying job in the software industry and the initiative to upgrade your skills then read this complete report.

See what interests you.

1. First you identify the technology you like to invest your time and energy to learn.
2. Then you understand the course or specialisation mentioned in this report applicable to the technology you want to master.
3. Next to enrol for the course and decide whether you need the certification.
4. Finally work hard to complete the course and take the certification that will improve your salary.

Once you have your certificate in hand you have two choices.

The first choice is to talk to your company about the skills you have upgraded. See what opportunities and income they offer.

The second choice is to find another job in the software industry aligned with you upgraded skillset.

Make a decision based on what you want your future to look like. There is no right choice or the wrong choice.

Without further ado let us dive into finding the best path for your career.



---

## 2. Why we need this?

In the introduction I mentioned that the salaries have remained stagnant for software engineers. This is across the world.

A software engineer in India starts at an average salary of between Rs 3,00,000 to 3,25,000 per annum. In the United States of America engineers earn between \$ 60,000 to \$ 75,000 per annum.

In both the cases if you compare a standard appraisal of 10% for India and 5% for US then the salaries will grow like this.

This is a hypothetical example. Sometimes appraisals will be good. Other times they will be bad. But in 10 years this is what will happen. Find out from software engineers who did not upgrade for 10 years what is their salary today. You will see a similar number.

Based on this data a software engineer in India who starts Rs 3,25,000 will have a salary of Rs 8,50,000 in 10 years. Whereas a software engineer in US who starts at \$ 75,000 will have a salary around \$ 122,000.

This will happen for all engineers who keep doing the same thing.

**If you keep doing the same things then you will keep getting the same results. - By Einstien.**

In the past software engineers had to change their career path in order to get a better salary. After a few years software engineers would switch to project manager in order to get better income.

But today you can earn high even if you decide to remain technical. You can remain technical and still have a chance of increasing your income.

This is possible by upgrading your skills to new age technologies. Technologies that are in demand. Most companies are ready to double or even triple your salary if you know these technologies. The only thing you have to do is to prove that you can work in these new age technology.

Just imagine!

If you can get the salary above Rs 10,00,000 in India or \$ 150,000 in US by investing just a few weeks or few months of your time. While you are still working at your job.

How would you feel?

More over forget about your feeling. If you save Rs 50,000 per month every month for a period of 10 years do you know the amount you are going to save.

Calculation results

Graphs of results

(interest compounded **quarterly** - added at the end of each quarter)

Year	Year Deposits	Year Interest	Total Deposits	Total Interest	Balance
1	₹600,000.00	₹26,699.56	₹650,000.00	₹26,699.56	₹676,699.56
2	₹600,000.00	₹71,733.58	₹1,250,000.00	₹98,433.14	₹1,348,433.14
3	₹600,000.00	₹120,003.70	₹1,850,000.00	₹218,436.84	₹2,068,436.84
4	₹600,000.00	₹171,742.47	₹2,450,000.00	₹390,179.31	₹2,840,179.31
5	₹600,000.00	₹227,199.14	₹3,050,000.00	₹617,378.45	₹3,667,378.45
6	₹600,000.00	₹286,640.87	₹3,650,000.00	₹904,019.32	₹4,554,019.32
7	₹600,000.00	₹350,354.02	₹4,250,000.00	₹1,254,373.34	₹5,504,373.34
8	₹600,000.00	₹418,645.54	₹4,850,000.00	₹1,673,018.89	₹6,523,018.89
9	₹600,000.00	₹491,844.42	₹5,450,000.00	₹2,164,863.31	₹7,614,863.31
10	₹600,000.00	₹570,303.31	₹6,050,000.00	₹2,735,166.62	₹8,785,166.62

You can save this much money only if you have additional income. If your average salary is Rs 3,50,000 and you high paying salary is Rs 10,00,000 you can easily save the money from your salary right from the first year.

After that even if you don't make any other savings even than you will have a big bank balance.

Will you not feel proud and successful when you have enough money. Moreover, you will save 8 to 10 years of struggle. Avoid the disappointments that come in each appraisal cycle.

Your success in your hands. Read this report. Take action to learn a new technology. Start today and double or triple your income in no time.



---

## 3. Courses For: *Highest Paying Jobs*

The following are some courses in each stream of high paying jobs. You can click on the link to find out more about the course.

### 1. Full Stack Development

#### 1.1. Full-Stack Web Development with React : [View Syllabus](#)

Learn front-end and hybrid mobile development, with server-side support, for implementing a multi-platform solution.

The courses cover front-end frameworks: **Bootstrap 4** and **React**. You'll also learn to create hybrid mobile applications, using **React Native**. On the server side, you'll learn to implement NoSQL databases using **MongoDB**, work within a **Node.js** environment and **Express** framework, and communicate to the client side through a RESTful API. Prior working knowledge of HTML, CSS and JavaScript.

[Check the complete syllabus of the Full-Stack Web Development with React](#)

#### 1.2. Web Application Development: Basic Concepts : [View Syllabus](#)

This course will give you the basic background, terminology and fundamental concepts that you need to understand in order to build modern full stack web applications.

In this course we will learn the major components of web application architectures, along with the fundamental design patterns and philosophies that are used to organize them. You will build and continually refine a fully functional full-stack web application as we progress through the modules in this course.

[Check the complete syllabus of the Web Application Development Basic Concepts](#)

#### 1.3. Web Applications for Everybody : [View Syllabus](#)

This is an introduction to building web applications for anybody who already has a basic understanding of responsive web design with JavaScript, HTML, and CSS. You will develop web and database applications in PHP, using SQL for database creation, as well as functionality in JavaScript, jQuery, and JSON.

---

Over the course you will create several web apps to add to your developer portfolio. This will prepare you, even if you have little to no experience in programming or technology, for entry level web developer jobs in PHP.

[Check the complete syllabus for Web Application for Everybody](#)

## **1.4.Python 3 Basics : [View Syllabus](#)**

The course is for you if you're a newcomer to Python programming, if you need a refresher on Python basics, or if you may have had some exposure to Python programming but want a more in-depth exposition and vocabulary for describing and reasoning about programs.

[Check of the complete syllabus of the Python Basics course here.](#)

## **1.5.Python for Everybody Specialization : [View Syllabus](#)**

This course builds on the success of the Python for Everybody course and will introduce fundamental programming concepts including data structures, networked application program interfaces, and databases, using the Python programming language. In the Capstone Project, you'll use the technologies learned throughout to design and create your own applications for data retrieval, processing, and visualization.

[Check the complete syllabus of Python for Everybody Specialization here](#)

## **1.6.Python 3 Programming Advanced : [View Syllabus](#)**

This course teaches the fundamentals of programming in Python 3. We will begin at the beginning, with variables, conditionals, and loops, and get to some intermediate material like keyword parameters, list comprehensions, lambda expressions, and class inheritance.

This course is a good next step for you if you have completed *Python for Everybody* but want a more in-depth treatment of Python fundamentals and more practice, so that you can proceed with confidence to specializations like *Applied Data Science with Python*.

[Check the complete syllabus for Python 3 Programming Specialization here](#)

## **1.7.Object Oriented Programming in Java : [View Syllabus](#)**

This course is for aspiring software developers with some programming experience in at least one other programming language (e.g., Python, C, JavaScript, etc.) who want to be able to solve more complex problems through objected-oriented design with Java. In addition to learning Java, you will gain experience with two Java

---

development environments (BlueJ and Eclipse), learn how to program with graphical user interfaces, and learn how to design programs capable of managing large amounts of data. These software engineering skills are broadly applicable across wide array of industries.

[Check the complete syllabus for Object Oriented Programming with Java](#)

### **1.8. Become a Full Stack .NET Developer (Beginner) : [View Syllabus](#)**

Become a Full Stack .NET Developer Beginner course is for professionals and experienced developers who want to build an application from A to Z. This course will show you how you can build a real world mini social networking application with [ASP.NET MVC5](#) and Entity Framework.

[Check the complete syllabus for Become a Full Stack .NET Developer Beginner here](#)

### **1.9. Become a Full Stack .NET Developer (Advanced) : [View Syllabus](#)**

Become a Full Stack .NET Developer Advanced Topics course is for professionals and experienced developers who want to improve front end and back end skills as .NET Developer. This is Part 2 of the Become a Full Stack .NET Developer where we will cover topics like CRUD Operations, Object-Oriented Design, and More.

[Check the complete syllabus for Become a Full Stack .NET Developer Advanced here](#)

## **2. Application Programming Interface**

### **2.1. Software Design and Architecture : [View Syllabus](#)**

In the Software Design and Architecture course you will learn how to apply design principles, patterns, and architectures to create reusable and flexible software applications and systems. You will learn how to express and document the design and architecture of a software system using a visual notation.

[Check the complete syllabus for Software Design and Architecture](#)

### **2.2. Developing APIs with Google Cloud's Apigee API Platform : [View Syllabus](#)**

This course will introduce you to the many out of box capabilities of the Google Cloud Platform (Apigee) and how to apply them to your APIs to properly

---

implement and secure them. Through a combination of video lectures, hands on labs, and supplemental materials, you'll learn how to design, build, and deploy your API solution using services on the Google Apigee Platform.

[Check the complete syllabus of the Developing APIs with Google Clouds APIGEE API Platform](#)

### **2.3.Service-Oriented Architecture : View Syllabus**

Based on an understanding of architectural styles, you will review architectures for web applications, then explore the basics of Service-Oriented Architecture (SOA) in two approaches: Web Services (WS\*) and Representational State Transfer (REST) architecture.

After completing this course, you will be able to: Describe SOA (Service-Oriented Architecture) to structure web-based systems. Explain WS\* services (i.e., SOAP over HTTP, WSDL, UDDI, BPEL). Apply REST architecture (i.e., JSON over HTTP, URI). Identify REST design principles. Create a system using REST interfaces. Apply microservice architecture.

[Check the complete syllabus of Service Oriented Architecture](#)

### **2.4.API Development in ASP.NET Core : View Syllabus**

This path will help you learn about all of the choices, from REST to GraphQL and how to implement each one. You will learn REST principles. Designing and Building asynchronous APIs. Building RESTful APIs using ASP.NET Core. Documenting APIs with OpenAPI/Swagger. APIs are at the heart of today's connected applications. ASP.NET Core offers a multitude of choices for developing APIs. This path will help you learn everything about designing and development of APIs.

[Check the complete syllabus of API Development in ASP.NET Core.](#)

### **2.5.AWS Fundamentals: Building Serverless Applications : View Syllabus**

This course will introduce you to Amazon Web Services (AWS) serverless architecture. Through demonstrations and hands-on exercises you will learn skills in building and deploying serverless solutions.

Using real-world examples of a serverless website and chat bot, you'll build upon your existing knowledge of the AWS cloud to take advantage of the benefits of modern architectures for greater agility, innovation, and lower total cost of

---

ownership across a range of AWS services, including AWS Lambda, Amazon API Gateway, Amazon DynamoDB, and Amazon Lex.

[Check the complete syllabus of AWS Fundamentals : Building Serverless Applications](#)

## **2.6.RESTful Web APIs with Spring : [View Syllabus](#)**

REST has enabled people to build mobile applications that capture our imagination, entertain us, and help us. REST has ushered in a generation of incredibly sophisticated, HTML5-powered browser applications. REST has also made it easier for organizations to adopt a service-oriented architecture with less friction.

REST's flexibility, however, can also be its greatest weakness: as often as not there is no clear guidance on where to go and how to get there. What does it mean to deploy a REST service? How do you handle errors in a REST service? What's the easiest way to write a REST service?

Spring Developer Advocate Josh Long discusses and demonstrates strategies for securing REST API access along with handling errors and versioning. These LiveLessons also cover how hypermedia and HATEOAS help you to deliver developer and consume friendly web services.

[Check the complete syllabus of RESTful Web APIs with Spring](#)

## **3. Business Process Management**

### **3.1.Business Process Management in Healthcare Organizations : [View Syllabus](#)**

Course content includes an overview of healthcare organization business processes including business process management approaches as well as a discussion of healthcare organization entrepreneurship as a business process. The course provides links to external sites to connect you to the larger "real world" of healthcare organization business processes, business process management, and entrepreneurship. The links also serve as resources you can take with you after you complete the course experience. And because everyone loves a road trip/ field trip, there are also "virtual field trips" to the often hidden places of interest on the web.

[Check the complete Syllabus of Business Process Management in Healthcare Organizations](#)

---

## **3.2.Business Analysis - CBAP : View Syllabus**

This skill is based on the IIBA BABOK Guide 4th Edition and Covers all IIBA CBAP Certification Objectives. This skill will also help you qualify for the CBAP certification exam by fulfilling the required 35 hours of professional development. In this course you will learn, Business analysis planning and monitoring. Strategy Analysis. Elicitation and Collaboration. Requirement analysis and design definition. Requirements life cycle management. Solution evaluation.

The following are the pre-requisites of the course. CBAP Certification Requirements - Complete a minimum of 7,500 hours of Business Analysis Work Experience in the last 10 years. - Within this experience, a minimum of 900 hours completed in 4 of the 6 BABOK® Guide Knowledge Areas, for a total of at least 3,600 of the required 7,500 total. - Complete a minimum of 35 hours of Professional Development in the last 4 years

[Check the complete syllabus of Business Analysis - CBAP](#)

## **3.3.Leadership and Management for Project Managers : View Syllabus**

Successful project managers in today's organizations are also effective leaders. They get the project work done by leading and managing project team members efficiently and effectively. This skill covers areas of leadership and management required for effective management of project teams. These include: problem solving, decision making, team building, collaboration, organization, time management, influence, and work ethics.

[Check the complete syllabus of Leadership and Management for Project Managers](#)

# **4. Cybersecurity**

## **4.1.Introduction to Cyber Security : View Syllabus**

**Introduction to Cyber Security** was designed to help learners develop a deeper understanding of modern information and system protection technology and methods. The learning outcome is simple: We hope learners will develop a lifelong passion and appreciation for cyber security, which we are certain will help in future endeavours. Students, developers, managers, engineers, and even private citizens will benefit from this learning experience. Special customised interviews with industry partners were included to help connect the cyber security concepts to live business experiences.

---

[Check the complete syllabus on Introduction to Cyber Security](#)

## **4.2.Cybersecurity : [View Syllabus](#)**

The Cybersecurity course covers the fundamental concepts underlying the construction of secure systems, from the hardware to the software to the human-computer interface, with the use of cryptography to secure interactions. These concepts are illustrated with examples drawn from modern practice, and augmented with hands-on exercises involving relevant tools and techniques. Successful participants will develop a way of thinking that is security-oriented, better understanding how to think about adversaries and how to build systems that defend against them.

[Check the complete syllabus of Cybersecurity](#)

## **4.3.Security Fundamentals : [View Syllabus](#)**

This course will help you to expand your knowledge about threats, attacks, and vulnerabilities. You will learn about security technologies and tools. Also, security architecture and design, identity and access management, risk management and cryptography.

This course does not require any prior knowledge or experience. It progresses from beginner levels to intermediate and advanced level course.

[Check the complete syllabus of Security Fundamentals](#)

## **4.4. Security Engineering : [View Syllabus](#)**

Security Engineering addresses the problem of inadequate and incomplete security solutions. The configuration of an integrated and resilient security framework is the goal of this course on Security Engineering. In this course, Security Engineering, you will learn the use of security models and gain the ability to develop and deploy a robust security solution tailored for your organization. First, you will learn about the traditional security approaches. Next, you will discover security challenges with modern technology. Finally, you will explore how to manage and operate a security program. When you're finished with this course, you will have the skills and knowledge of security engineering needed to design and deploy an enterprise-wide security solution.

[Check the complete syllabus of Security Engineering](#)

# **5. Legacy Modernisation**

---

## 5.1. Software Product Management : View Syllabus

In this Software Product Management Course, you will master Agile software management practices to lead a team of developers and interact with clients. In the final Project, you will practice and apply management techniques to realistic scenarios that you will face as a Software Product Manager. You will have the opportunity to share your experiences and learn from the insights of others as part of a Software Product Management.

[Check the complete syllabus of Software Product Management](#)

## 5.2. Software Development Lifecycle : View Syllabus

This course is designed for people who are new to software engineering. It's also for those who have already developed software, but wish to gain a deeper understanding of the underlying context and theory of software development practices.

At the end of this course, we expect learners to be able to:

- 1.) Build high-quality and secure software using SDLC methodologies such as agile, lean, and traditional/waterfall.
- 2.) Analyse a software development team's SDLC methodology and make recommendations for improvements.
- 3.) Compare and contrast software development methodologies with respect to environmental, organisational, and product constraints.

[Check the complete syllabus of Software Development Lifecycle](#)

## 5.3. Domain-Driven Design: Working with Legacy Projects : View Syllabus

As a programmer, you'd love to only work on green-field projects. However, you are most likely working on a legacy project right now, or will be at some point in the future. In this course, Domain-Driven Design: Working with Legacy Projects, you'll develop skills that will help you manage these legacy projects to deliver new functionality and keep the stakeholders happy. First, you'll learn how to make your way through the legacy code base by refactoring it one step at a time. Next, you'll explore how to handle rewrites, when to do that, and when it is better to keep the existing legacy code base instead. Finally, you'll discover techniques such as building an Anticorruption Layer, the Strangler pattern, and Branch by Abstraction pattern to deal with these code bases. By the end of this course, you'll have a solid



---

understanding of the theory and practice of improving the functionality and scalability of legacy projects.

[Check the complete syllabus of Domain-Driven Design: Working with Legacy Projects](#)

## 6. Enterprise Cloud

### 6.1. Architecting with Google Compute Engine : [View Syllabus](#)

This specialization introduces learners to the comprehensive and flexible infrastructure and platform services provided by Google Cloud Platform, with a focus on Compute Engine. Through a combination of presentations, demos, and hands-on labs, participants explore and deploy solution elements, including infrastructure components such as networks, systems and applications services. This course also covers deploying practical solutions including securely interconnecting networks, customer-supplied encryption keys, security and access management, quotas and billing, and resource monitoring.

This class is intended for Cloud Solutions Architects, DevOps Engineers or individuals using Compute Engine.

[Check the complete syllabus of Architecting with Google Compute Engine](#)

### 6.2. Cloud Computing : [View Syllabus](#)

The Cloud Computing courses takes you on a tour through cloud computing systems. We start in the middle layer with Cloud Computing Concepts covering core distributed systems concepts used inside clouds, move to the upper layer of Cloud Applications and finally to the lower layer of Cloud Networking. We conclude with a project that allows you to apply the skills you've learned throughout the courses.

[Check the complete syllabus of Cloud Computing](#)

### 6.3. Developing Applications with Google Cloud Platform : [View Syllabus](#)

In this course, application developers learn how to design, develop, and deploy applications that seamlessly integrate managed services from the Google Cloud Platform (GCP). Through a combination of presentations, demos, and hands-on labs, participants learn how to use GCP services and pre-trained machine learning

---

APIs to build secure, scalable, and intelligent cloud-native applications. Learners can choose to complete labs in their favourite language: Node.js, Java, or Python.

[Check the complete syllabus of Developing Applications with Google Cloud Platform](#)

## **6.4.AWS Fundamentals: Going Cloud-Native : [View Syllabus](#)**

This course will introduce you to Amazon Web Services (AWS) core services and infrastructure. Through demonstrations you'll learn how to use and configure AWS services to deploy and host a cloud-native application.

Early in the course, your AWS instructors will discuss how the AWS cloud infrastructure is built, walk you through Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Lightsail compute services. They'll also introduce you to networking on AWS, including how to set up Amazon Virtual Public Cloud (VPC) and different cloud storage options, including Amazon Elastic Block Storage (EBS), Amazon Simple Storage Service (S3) and Amazon Elastic File Service (EFS). Later in the course you'll learn about AWS Database services, such as Amazon Relational Database Service (RDS) and Amazon DynamoDB. Your instructors will also walk you through how to monitor and scale your application on AWS using Amazon CloudWatch and Amazon EC2 Elastic Load Balancing (ELB) and Auto Scaling. Lastly, you'll learn about security on AWS, as well as how to manage costs when using the AWS cloud platform.

This course has been developed by AWS, and is delivered by AWS technical instructors who teach cloud computing courses around the globe.

[Check the complete syllabus of AWS Fundamentals : Going Cloud-Native](#)

## **6.5.AWS Fundamentals: Building Serverless Applications : [View Syllabus](#)**

This course will introduce you to Amazon Web Services (AWS) serverless architecture. Through demonstrations and hands-on exercises you'll learn skills in building and deploying serverless solutions.

Using real-world examples of a serverless website and chat bot, you'll build upon your existing knowledge of the AWS cloud to take advantage of the benefits of modern architectures for greater agility, innovation, and lower total cost of ownership across a range of AWS services, including AWS Lambda, Amazon API Gateway, Amazon DynamoDB, and Amazon Lex.

---

This course has been developed by AWS, and is delivered by AWS technical instructors who teach cloud computing courses around the globe.

[Check the complete Syllabus for AWS Fundamentals : Building Serverless Application](#)

## **6.6.AWS Fundamentals: Migrating to the Cloud : [View Syllabus](#)**

This four week course focuses on migrating workloads to AWS. We will focus on analyzing your current environment, planning your migration, AWS services that are commonly used during your migration, and the actual migration steps.

[Check the complete syllabus of AWS Fundamentals : Migrating to the Cloud](#)

## **6.7. .NET Developer on Microsoft Azure : [View Syllabus](#)**

This course is for developers and architects who need to come up to speed quickly on Microsoft Azure. In this path, you will learn how to plan, build and deploy applications and APIs into Microsoft Azure. You will learn how to automate the cloud to achieve continuous deployment and focus on the features of Azure that allow us to build scalable, resilient systems that can recover from disasters. From App Services and software containers to Redis Cache and Service Fabric, these courses will give you the fundamental knowledge you need to start working confidently on Microsoft Azure. You need to have an understanding of C#, ASP.NET and Visual Studio, as well as web development experience with HTML and CSS.

[Check the complete syllabus for .NET Developer on Microsoft Azure](#)

## **6.8.Google: Professional Cloud Data Engineer : [View Syllabus](#)**

This skill path covers all the objectives needed to be a Data Engineer on Google Cloud. You will learn in depth how to use the products and services as well as how to complete the most common tasks with your Data in GCP. Although this path aligns with the topics for the GCP Cloud Data Engineer Professional exam. It is not a cert exam prep course. This is a path to teach the practical on the job skills for Data on GCP.

[Check the complete syllabus for Google: Professional Cloud Data Engineer](#)

# **7. Big Data and Data Science**

---

## 7.1. Big Data Specialization : [View Syllabus](#)

Do you need to understand big data and how it will impact your business? This Specialization is for you. You will gain an understanding of what insights big data can provide through hands-on experience with the tools and systems used by big data scientists and engineers. Previous programming experience is not required! You will be guided through the basics of using Hadoop with MapReduce, Spark, Pig and Hive. By following along with provided code, you will experience how one can perform predictive modeling and leverage graph analytics to model problems. This specialization will prepare you to ask the right questions about data, communicate effectively with data scientists, and do basic exploration of large, complex datasets. In the final Capstone Project, developed in partnership with data software company Splunk, you'll apply the skills you learned to do basic analyses of big data.

[Check the complete syllabus of Big Data Specialization](#)

## 7.2. Data Engineering, Big Data, and Machine Learning : [View Syllabus](#)

This online specialization provides participants a hands-on introduction to designing and building data pipelines on Google Cloud Platform. Through a combination of presentations, demos, and hand-on labs, participants will learn how to design data processing systems, build end-to-end data pipelines, analyze data and derive insights. The course covers structured, unstructured, and streaming data.

This course teaches the following skills: Design and build data pipelines on Google Cloud Platform. Lift and shift your existing Hadoop workloads to the Cloud using Cloud Dataproc. Process batch and streaming data by implementing autoscaling data pipelines on Cloud Dataflow. Manage your data Pipelines with Data Fusion and Cloud Composer. Derive business insights from extremely large datasets using Google BigQuery. Learn how to use pre-built ML APIs on unstructured data and build different kinds of ML models using BigQuery ML. Enable instant insights from streaming data

This class is intended for developers who are responsible for: Extracting, Loading, Transforming, cleaning, and validating data. Designing pipelines and architectures for data processing. Integrating analytics and machine learning capabilities into data pipelines. Querying datasets, visualizing query results and creating reports

[Check the complete syllabus of Data Engineering, Big Data, and Machine Learning](#)

---

## 7.3.Modern Big Data Analysis with SQL : [View Syllabus](#)

This Specialization teaches the essential skills for working with large-scale data using SQL.

Maybe you are new to SQL and you want to learn the basics. Or maybe you already have some experience using SQL to query smaller-scale data with relational databases. Either way, if you are interested in gaining the skills necessary to query big data with modern distributed SQL engines, this Specialization is for you.

Most courses that teach SQL focus on traditional relational databases, but today, more and more of the data that's being generated is too big to be stored there, and it's growing too quickly to be efficiently stored in commercial data warehouses. Instead, it's increasingly stored in distributed clusters and cloud storage. These data stores are cost-efficient and infinitely scalable.

To query these huge datasets in clusters and cloud storage, you need a newer breed of SQL engine: distributed query engines, like Hive, Impala, Presto, and Drill. These are open source SQL engines capable of querying enormous datasets. This Specialization focuses on Hive and Impala, the most widely deployed of these query engines.

[Check the complete syllabus of Modern Big Data Analysis with SQL](#)

## 7.4.The Data Scientist's Toolbox [View Syllabus](#)

In this course you will get an introduction to the main tools and ideas in the data scientist's toolbox. The course gives an overview of the data, questions, and tools that data analysts and data scientists work with. There are two components to this course. The first is a conceptual introduction to the ideas behind turning data into actionable knowledge. The second is a practical introduction to the tools that will be used in the program like version control, markdown, git, GitHub, R, and RStudio.

[Check the complete syllabus of The Data Scientist's Tool Box course here](#)

## 7.5.Introduction to Data Science [View Syllabus](#)

In this Specialization learners will develop foundational Data Science skills to prepare them for a career or further learning that involves more advanced topics in Data Science. The specialization entails understanding what is Data Science and the various kinds of activities that a Data Scientist performs. It will familiarize learners with various open source tools, like Jupyter notebooks, used by Data Scientists. It will teach you about methodology involved in tackling data science problems. The

---

specialization also provides knowledge of relational database concepts and the use of SQL to query databases. Learners will complete hands-on labs and projects to apply their newly acquired skills and knowledge.

Upon receiving the certificate for completion of the specialization, you will also receive an IBM Badge as a **Specialist in Data Science Foundations**.

[Check the complete syllabus for Introduction to Data Science Specialization here](#)

## **7.6.AWS Big Data : View Syllabus**

Processing big data jobs is a common use of cloud resources mainly because of the sheer computing power needed. AWS has created several services that enable you to use big data effectively for your projects. This path will teach you the basics of big data on AWS

You will learn the following : AWS Athena, S3 Storage, DynamoDB, Redshift Data Warehouse, Kinesis, and Elasticsearch

[Check the complete syllabus for AWS Big Data](#)

## **7.7.Google: Professional Cloud Data Engineer : View Syllabus**

This skill path covers all the objectives needed to be a Data Engineer on Google Cloud. You will learn in depth how to use the products and services as well as how to complete the most common tasks with your Data in GCP. Although this path aligns with the topics for the GCP Cloud Data Engineer Professional exam. It is not a cert exam prep course. This is a path to teach the practical on the job skills for Data on GCP.

What you will learn : Dataproc, Dataflow and Apache Beam, GCP Pub/Sub, BigQuery, GCP Cloud SQL, GCP Cloud Spanner, Cloud Datastore, Firestore, BigTable, Datalab, ML Engine, Machine Learning APIs, and Data Architecture on GCP

[Check the complete syllabus for Google: Professional Cloud Data Engineer](#)

# **8. DevOps**

## **8.1.DevOps Culture and Mindset : View Syllabus**

This course gives you the basic foundational principles of DevOps with a particular focus on culture and the DevOps mindset. We'll learn about how DevOps is

---

grounded in lean principles, and how it can help improve collaboration between developers and operations team members. We'll learn about ideas regarding systems thinking, feedback loops, continuous improvement, loosely coupled architecture and teams, managing risk, and dealing with unplanned work. We'll learn about strategies to manage work, monitor it, keep it organized, and maintain a high level of quality by following key DevOps principles. We'll also discuss various organizational models and structures that are used by companies in their DevOps transformations. You'll learn about value stream mapping, and ensuring continuous workflow. Ultimately, we'll learn key ideas and tactics that you can employ at your own organizations to improve both time-to-market and increase the value delivered for your customers, no matter your product line or industry.

[Check the complete syllabus for DevOps Culture and Mindset](#)

## **8.2. Continuous Delivery & DevOps : [View Syllabus](#)**

Amazon famously delivers new code every 11.6 seconds. Just a few years ago, this was unthinkable: many 'cutting edge' firms would release software quarterly. When it comes to digital innovation, velocity is critical and many would say it's the most reliable determinant of success.

Bringing an organization to the state of the art (or even functional capability) in this area requires strong work in a combination of disciplines and a combination of both technical and managerial skills. There is no single cookie-cutter approach for achieving this capability. Much like agile, the right focus and formulation depends a lot on the facts and circumstances of the team. This course will provide you with the interdisciplinary skill set to cultivate a continuous deployment capability in your organization.

[Check the complete syllabus for Continuous Delivery and DevOps](#)

## **8.3. Architecting with Google Compute Engine : [View Syllabus](#)**

This specialization introduces learners to the comprehensive and flexible infrastructure and platform services provided by Google Cloud Platform, with a focus on Compute Engine. Through a combination of presentations, demos, and hands-on labs, participants explore and deploy solution elements, including infrastructure components such as networks, systems and applications services. This course also covers deploying practical solutions including securely interconnecting networks, customer-supplied encryption keys, security and access management, quotas and billing, and resource monitoring.

---

This class is intended for Cloud Solutions Architects, DevOps Engineers or individuals using Compute Engine.

[Check the complete syllabus of Architecting with Google Compute Engine](#)

## 9. IT Automation

### 9.1. Google IT Automation with Python : [View Syllabus](#)

This new beginner-level, six-course certificate, developed by Google, is designed to provide IT professionals with in-demand skills -- including Python, Git, and IT automation -- that can help you advance your career.

This certificate can be completed in about 6 months and is designed to prepare you for a variety of roles in IT, like more advanced IT Support Specialist or Junior Systems Administrator positions. Upon completing the program, you'll have the option to share your information with potential employers, like Walmart, Sprint, Hulu, Bank of America, Google (of course!), and more.

[Check the complete syllabus of Google IT Automation with Python](#)

## 10. Enterprise Service Management

## 11. Internet of Things

## 12. Enterprise Learning Management

## 13. Robotic Process Automation

## 14. Artificial Intelligence & Machine Learning

### 14.1. Applied Data Science with Python Specialization [View Syllabus](#)

The 5 courses in this University of Michigan specialization introduce learners to data science through the python programming language. This skills-based specialization is intended for learners who have a basic python or programming background, and want to apply statistical, machine learning, information visualization, text analysis, and social network analysis techniques through



---

popular python toolkits such as pandas, matplotlib, scikit-learn, nltk, and networkx to gain insight into their data.

Introduction to Data Science in Python (course 1), Applied Plotting, Charting & Data Representation in Python (course 2), and Applied Machine Learning in Python (course 3) should be taken in order and prior to any other course in the specialization. After completing those, courses 4 and 5 can be taken in any order. All 5 are required to earn a certificate.

[Check the complete syllabus of Applied Data Science with Python Specialization here](#)

## **14.2. Machine Learning Specialization View Syllabus**

This Specialization from leading researchers at the University of Washington introduces you to the exciting, high-demand field of Machine Learning. Through a series of practical case studies, you will gain applied experience in major areas of Machine Learning including Prediction, Classification, Clustering, and Information Retrieval. You will learn to analyze large and complex datasets, create systems that adapt and improve over time, and build intelligent applications that can make predictions from data.

[Check the complete syllabus of Machine Learning Specialisation here](#)

## **14.3. Data Science: Foundations using R View Syllabus**

This Specialization covers foundational data science tools and techniques, including getting, cleaning, and exploring data, programming in R, and conducting reproducible research. Learners who complete this specialization will be prepared to take the *Data Science: Statistics and Machine Learning* specialization, in which they build a data product using real-world data.

The five courses in this specialization are the very same courses that make up the first half of the Data Science Specialization. This specialization is presented for learners who want to start and complete the foundational part of the curriculum first, before moving onto the more advanced topics in *Data Science: Statistics and Machine Learning*.

[Check the complete syllabus of Data Science Foundations using R here](#)

## **14.4. Data Science: Statistics and Machine Learning View Syllabus**

---

This specialization continues and develops on the material from the *Data Science: Foundations using R specialization*. It covers statistical inference, regression models, machine learning, and the development of data products. In the Capstone Project, you'll apply the skills learned by building a data product using real-world data. At completion, learners will have a portfolio demonstrating their mastery of the material.

The five courses in this specialization are the very same courses that make up the second half of the Data Science Specialization. This specialization is presented for learners who have already mastered the fundamentals and want to skip right to the more advanced courses.

[Check the complete syllabus for Data Science: Statistics and Machine Learning here](#)

## **14.5. Deep Learning View Syllabus**

If you want to break into AI, this Specialization will help you do so. Deep Learning is one of the most highly sought after skills in tech. We will help you become good at Deep Learning.

In five courses, you will learn the foundations of Deep Learning, understand how to build neural networks, and learn how to lead successful machine learning projects. You will learn about Convolutional networks, RNNs, LSTM, Adam, Dropout, BatchNorm, Xavier/He initialization, and more. You will work on case studies from healthcare, autonomous driving, sign language reading, music generation, and natural language processing. You will master not only the theory, but also see how it is applied in industry. You will practice all these ideas in Python and in TensorFlow, which we will teach.

You will also hear from many top leaders in Deep Learning, who will share with you their personal stories and give you career advice.

AI is transforming multiple industries. After finishing this specialization, you will likely find creative ways to apply it to your work. We will help you master Deep Learning, understand how to apply it, and build a career in AI.

[Check the complete syllabus of Deep Learning here](#)

## **14.6. Advanced Machine Learning Specialization View Syllabus**

This specialization gives an introduction to deep learning, reinforcement learning, natural language understanding, computer vision and Bayesian methods. Top Kaggle machine learning practitioners and CERN scientists will share their

---

experience of solving real-world problems and help you to fill the gaps between theory and practice. Upon completion of 7 courses you will be able to apply modern machine learning methods in enterprise and understand the caveats of real-world data and settings.

[Check the complete syllabus of Advanced Machine Learning Specialization here](#)

## **15. Digital Marketing**

## **16. Digital Product Engineering**

## **17. Omni Channel Marketing**

## **18. Content Personalisation**

## **19. 3D Printing**

## **20. Augmented Reality**

## **21. Blockchain**

## **22. Drones**

**Please Note : This document is a work in progress. I am currently searching for the best courses for the rest of the High Paying Jobs. As soon as they are available I will update the document.**

**You can down load the document from the same place on my website.**

