

Introduction to Coding Practices & AI Fundamentals

Embark on an introductory module that delves into the essential components of coding practices and the transformative potential of artificial intelligence. You'll explore coding languages, algorithmic thinking, and the basics of AI applications, forming the foundational understanding necessary to engage in undergraduate-level theories in software development and AI. A visit to the Google headquarters in Silicon Valley offers students a deep dive into the world of software development and artificial intelligence. Exploring Google's innovation labs, AI research centers, and collaborative workspaces, participants can understand how cutting-edge technology shapes our digital landscape. Interactions with software engineers and AI experts provide valuable insights into coding, algorithm development, and the future of AI-driven technologies.

Practical Experiences

Participating in practical experiences centred around software development and AI in San Francisco unlocks the world of cutting-edge technology. Site visits to tech giants, coding bootcamps, and AI research centres offer insights into coding languages, algorithm development, and machine learning applications within diverse contexts. You'll have the chance to explore advancements in AI, data science, and software innovation.

Real World Project

Embark on a coding adventure by designing and building a software application that leverages the power of AI to solve a real-world challenge. From conceptualization and algorithm design to coding implementation and rigorous testing, you'll bring your software development and AI integration skills to life.

Professional Development

Bridging academia, technological innovation, and labour market information, this module uncovers the array of roles within software development and AI. Featuring guest lectures, expert discussions, and workshops on coding and AI integration, you'll acquire vital proficiencies. Individualized coaching sessions provide tailored advice and a career path, ensuring lasting advantages beyond your participation in the Software Development & AI Insights programme.

Coding Fundamentals and Programming Paradigms

Embark on a comprehensive journey through coding fundamentals and programming paradigms in this foundational session. Participants will uncover the intricacies of programming languages, syntax, and core concepts essential for software development. Dive deep into the principles of object-oriented and functional programming, gaining a comprehensive understanding of modular design's significance in creating efficient and robust software solutions.

Coding Workshop with Developers

Silicon Valley Developers will host our coding and AI workshop. Participants can engage in coding exercises, explore machine learning concepts, and gain insights into AI applications. This workshop offers exposure to cutting-edge technologies under the guidance of tech experts.

Artificial Intelligence: Concepts and Applications

Delve into the multifaceted world of artificial intelligence and its diverse applications in this illuminating session. Explore the fundamentals of machine learning, neural networks, and deep learning algorithms. Gain insights into real-world AI applications, from natural language processing to image recognition. Engage in discussions about AI's ethical considerations and its potential impact on industries and society. Through thought-provoking examples, participants will cultivate a nuanced understanding of the transformative power of AI.

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Ethics and Responsible Development

Engage in thought-provoking discussions about the ethical considerations and responsible development of AI technologies and applications. Explore topics such as bias in AI algorithms, algorithmic transparency, accessibility in code, and the broader societal implications of AI-driven decisions. Delve into strategies for mitigating bias and ensuring that AI systems and applications promote fairness and inclusivity. By the end of the session, participants will be equipped to navigate the intricate ethical landscape surrounding software development.

AI in Industry: Transforming Businesses

Embark on an exploration of AI's transformative impact on industries and businesses in this forward-looking session. Participants will investigate how AI technologies are enhancing customer experiences, optimizing supply chains, and driving innovation. Engage in discussions about the challenges and opportunities of integrating AI into various business processes. Through real-world case studies, participants will gain insights into how AI is reshaping industries and revolutionizing the way companies operate.

Marketing & Entertainment

Introduction to Marketing Strategies & Consumer Behaviour

Embark on an introductory module that unveils the captivating world of marketing strategies and consumer behaviour. You'll delve into the psychology of consumer choices, analyze effective advertising campaigns, and understand the nuances of branding techniques. This module offers a foundational understanding of the key theories, metrics and terminology used in the study of marketing and entertainment.

Practical Experiences

Venturing into the city for practical experiences in marketing and entertainment unveils the dynamic world of storytelling and audience engagement. Exploring advertising agencies, media production studios, and entertainment headquarters will allow you to delve into content creation, brand management, and social media strategies. You'll have the chance to explore emerging technologies and radical venues that are shaping the future of marketing and entertainment.

Fundamentals of Marketing

Dive into the core principles of marketing and discover how successful brands captivate audiences. Explore how to develop a brand identity, target specific consumers, and utilize diverse marketing channels. Through engaging discussions and hands-on activities, you'll gain valuable insights into modern marketing techniques and strategies that drive success in today's competitive world.

Marketing's Role in the Entertainment Industry

Uncover the dynamic synergy between marketing and the entertainment industry in this engaging session. Explore how marketing strategies are tailored to promote movies, music, TV shows, and other forms of entertainment. Examine the critical role of marketing departments within entertainment companies, from creating captivating promotional campaigns to crafting brand identities that resonate with audiences. By delving into real-world case studies, participants will grasp the intricate interplay between marketing efforts and the success of entertainment ventures.

Social Media and Influencer Marketing

Discover how social media has transformed the marketing landscape, and learn how influencers are reshaping the way brands connect with consumers. Gain insights into crafting impactful social media strategies, fostering authentic collaborations with influencers, and utilising digital platforms to build brand awareness and drive engagement in today's digital-first world.

Real World Project - Marketing Campaign Showcase

Put your skills to the test by developing and presenting a marketing campaign for a product or service. Combine branding, strategy, and digital marketing techniques to craft a campaign that captures attention and delivers results. This hands-on project allows you to showcase your creativity and strategic thinking, preparing you for future opportunities in the marketing and entertainment industries.

Environment & Sustainability

Introduction to Sustainability and Social Innovation

This programme explores the fundamentals of sustainable development and social innovation. Students will learn about key concepts such as climate resilience, renewable energy, and sustainable planning. Discussions and case studies provide a strong foundation for understanding the dynamics of social impact and environmental sustainability.

Global Challenges in a Changing World

Step into the forefront of global issues and explore challenges like climate change, resource scarcity, and social inequality. Through engaging discussions and case studies, you'll uncover how innovative, sustainable solutions are helping companies, countries, and communities around the world build resilience. Discover how you can contribute to creating a better future by addressing the complex problems shaping today's society.

Sustainability and Environmental Policy in Action

Dive into the fascinating world of sustainability and environmental policy. Learn how local and global initiatives are driving change, from renewable energy technologies to sustainable development goals. Gain a deeper understanding of how governments, businesses, and communities collaborate to tackle environmental issues, and see how these efforts shape a more sustainable world.

AI and Emerging Technologies in Sustainability

Participants explore the role of AI and emerging technologies in addressing sustainability challenges. We delve into how AI is transforming fields like environmental monitoring, waste management, and sustainable agriculture.

Through case studies, students analyse disruptive technologies such as machine learning for predictive environmental analysis, AI-powered recycling solutions, and data-driven approaches to energy efficiency. Attendees gain insights into the ethical and regulatory considerations involved in applying AI to sustainability, as well as its potential for creating scalable solutions to address social and environmental needs globally.

Practical Workshops

Participants will engage in workshops with sustainability-focused organisations and social innovation hubs in San Francisco, offering a firsthand look into tackling global challenges like climate change, urban sustainability, and social equity. These sessions cover essential topics, including sustainable design, modern business practices, and resource management, equipping students with the tools to understand and approach these issues in the age of rapid technological advancement.

Ethics and Responsibility in Social Impact

During the programme, participants examine the ethical challenges and responsibilities within the fields of social impact and sustainability. Through case studies and debates, students discuss issues such as corporate responsibility, environmental justice, and ethical decision-making. By the end of the programme, they will be equipped to navigate complex ethical landscapes essential for meaningful work in sustainability.

Entrepreneurship

Introduction to Entrepreneurial Principles & Innovation Theories

Embark on an introductory module that immerses you in the fundamental aspects of entrepreneurship and innovation. You'll explore the components of successful startups, examine disruptive innovation models, and

understand the intricacies of business growth. This module provides a foundational overview of the key theories about what is behind success in the field of entrepreneurship.

Silicon Valley Innovation Tour

A tour of Silicon Valley provides an unmatched opportunity for students to experience the epicenter of entrepreneurship and innovation. Visiting renowned tech companies, co-working spaces, and startup incubators, participants can witness firsthand the spirit of creativity, risk-taking, and disruptive innovation. Engaging with entrepreneurs, investors, and tech experts, students gain insights into the process of idea generation, funding, and scaling a business in the fast-paced world of tech startups.

Practical Experiences

Engaging in practical experiences focused on entrepreneurship in San Francisco provides a firsthand understanding of the startup ecosystem. Site visits to innovation hubs, co-working spaces, and entrepreneur meetups will immerse you in the culture of innovation, idea generation, and pitching to investors. You'll have the opportunity to explore emerging industries and disruptive technologies that fuel entrepreneurial endeavours.

Real World Project

Ignite your entrepreneurial spirit by developing and validating a startup concept that addresses a contemporary challenge. From ideation and market analysis to business model creation, you'll craft a robust entrepreneurial proposal ready for potential implementation and develop the interpersonal skills that will enable you to build a powerful entrepreneurial network.

Professional Development

Creating a connection between learning and real-world innovation, this module unveils the gamut of opportunities in entrepreneurship. Comprising guest talks, expert panels, and workshops on startup ecosystems and business model innovation, you'll foster essential skills. Tailored coaching sessions offer personalized insights and a roadmap for your career journey, ensuring enduring benefits beyond your involvement in the Entrepreneurship Insights programme.

Startup Ecosystems and Innovation

In this in-depth exploration, participants will delve into the dynamics of startup ecosystems and innovation. We will analyze the elements that contribute to a thriving startup environment, from incubators and accelerators to venture capital funding. Through case studies, participants will gain insights into the journey of successful startups, exploring the challenges and opportunities they face. Attendees will also examine the legal considerations that entrepreneurs encounter in their pursuit of innovation.

Startup Incubator Experience

Work with a leading startup accelerator in our entrepreneurship workshop. Students can interact with

startup founders, learn about ideation, and explore the startup ecosystem. This workshop provides insights into the journey of building and scaling successful startups.

Business Model Analysis and Market Entry Strategies

This comprehensive session focuses on business model analysis and market entry strategies for aspiring entrepreneurs. Participants will examine various business models, from subscription-based to freemium, and evaluate their suitability for different industries. Through case studies, attendees will explore effective market entry strategies, considering factors like competition, target audience, and scalability. Participants will also gain insights into legal considerations related to intellectual property and partnerships.

Disruptive Tech Insights

In this forward-thinking exploration, participants will uncover the realm of disruptive tech insights that shape the entrepreneurial landscape. We will analyse emerging technologies such as blockchain, artificial intelligence, and Internet of Things (IoT), and their potential to disrupt industries. Through case studies, participants will explore how startups leverage disruptive tech for innovation and competitive advantage. Attendees will also gain insights into legal considerations surrounding emerging technologies and data privacy.

Mastering the Art of Pitching and Investor Presentations

In this comprehensive session, participants will dive into the world of effective pitching and investor presentations. Explore the key elements of a compelling pitch, from crafting a captivating narrative to communicating value propositions that resonate with potential investors. Understand the psychology behind successful pitches and learn how to address common investor concerns. Delve into techniques for delivering confident and persuasive presentations that leave a lasting impact. By the end of this session, participants will have honed their pitching skills and gained insights into the art of securing investor interest and support.

Navigating Organizational Structures in Founder-Led Startups

Explore the different approaches to structuring startups, ranging from flat hierarchies to matrix structures. Understand the advantages and challenges associated with each model and its impact on decision-making, communication, and innovation. Dive into real-world case studies that showcase successful organizational strategies employed by prominent founder-led startups. By examining the role of leadership, delegation, and team dynamics, participants will gain a comprehensive understanding of how to foster a productive and cohesive environment.

Creative Industries

Creativity, Innovation, and Design Thinking

Discover how creative thinking drives progress across industries. You'll learn design thinking principles, empathy, ideation, prototyping, and testing, to approach challenges creatively and strategically. Group projects will allow you to apply these steps to practical scenarios, developing both confidence and flexibility. This topic helps you understand how innovation and creativity intersect, preparing you to contribute ideas that make a real-world impact.

Storytelling and Media Production

Explore how stories connect audiences and ideas. You'll study how narrative and visual design work together in

media, advertising, and digital platforms. Through hands-on activities, you'll practise shaping and presenting stories using words, visuals, and technology. This topic helps you understand how storytelling builds engagement and influence across creative sectors, from marketing and film to communication and user experience.

Art, Culture, and Creative Expression

Examine how creative work reflects and shapes culture. You'll explore the relationship between art, design, and identity, learning how cultural movements inspire innovation. Practical projects will encourage you to express ideas visually and conceptually. This topic highlights how creativity not only entertains or informs but also provokes thought and dialogue — helping you develop cultural awareness as a foundation for your creative practice.

Technology and Digital Creativity

Discover how emerging technologies are transforming the creative world. You'll learn how digital tools support design, media, and storytelling, from AI and motion graphics to interactive media. Group challenges will help you explore how creativity and technology merge in industries such as entertainment, marketing, and product design. This topic builds digital literacy and helps you understand how technology enhances, rather than replaces, human creativity.

Creative Entrepreneurship and Branding

Learn how creative ideas become successful ventures. You'll explore the fundamentals of creative entrepreneurship, from concept development to marketing and presentation. Using real-world examples from San Francisco's design and tech scenes, you'll see how creativity can be channelled into business innovation.

This topic helps you build commercial awareness and presentation skills while showing how creative thinkers bring ideas to market.

Future Pathways in the Creative Industries

Reflect on how your creative strengths can shape your career journey. You'll explore potential roles in design, media, culture, and innovation, and learn how creative professionals build careers that combine imagination with strategy. This topic encourages you to think about transferable skills, such as communication, collaboration, and adaptability, that will help you succeed across creative fields and beyond.

Career Development Plan

Throughout the programme, every student will work on an individual project focused on shaping their future career pathway. This project is designed to bring together the knowledge and insights gained during the programme, including an understanding of the subject area, the industry, and the variety of opportunities it offers. Guided by their own interests and passions, students will consider potential directions for study and work. With support from tutors during one-to-one sessions, participants will develop their project into a clear and personalised plan, which they will present at the end of the programme.

Business Management

Foundations of Business and Management

Learn how organisations are structured and managed to achieve their goals. You'll explore the functions of planning, organising, leading, and controlling, applying these ideas to case studies and group challenges. Through interactive discussions, you'll analyse how managers align people and processes to deliver results. This topic helps

you understand the foundations of management and how effective coordination drives business performance across different types of organisations.

Strategy and Decision-Making

Examine how businesses make informed decisions and position themselves for success. You'll practise analysing real or simulated scenarios using strategic frameworks and learn how data supports decision-making. Group exercises will challenge you to think critically about growth, competition, and sustainability. This topic highlights how managers balance long-term vision with short-term action, a key skill for anyone interested in organisational leadership or consulting careers.

Operations and Project Management

Explore how businesses design efficient systems to deliver value. You'll look at how products and services move from concept to customer, learning to identify areas for improvement in workflows or resource use. Through hands-on simulations and collaborative exercises, you'll apply problem-solving techniques to streamline processes. This topic emphasises how planning, coordination, and attention to detail create operational excellence in both established and emerging industries.

Leadership and Organisational Behaviour

Understand how leadership shapes team performance and company culture. You'll explore different leadership approaches, communication styles, and motivational strategies. Practical group work will allow you to step into leadership roles, practise decision-making, and reflect on how to guide others effectively. This topic builds your awareness of what makes leaders successful in dynamic environments and how empathy, vision, and adaptability influence organisational outcomes.

Innovation and Change Management

Discover how businesses adapt to evolving technologies and markets. You'll study how innovation is managed within organisations, not just in startups, but also in established companies seeking to remain competitive.

Group challenges will focus on problem-solving and creative thinking, helping you develop a practical approach to managing change. This topic connects innovation with leadership, highlighting how managers turn new ideas into sustainable progress.

Business Communication and Professional Skills

Effective communication is at the core of successful management. You'll learn how to present ideas clearly, structure persuasive arguments, and adapt messages for different audiences. Practical activities such as meetings and presentations will help you build confidence and professionalism. This topic focuses on developing practical communication skills that strengthen teamwork, negotiation, and leadership, essential tools for success in any business environment.

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Artificial Intelligence

Introduction to AI and Machine Learning

Begin with a clear overview of AI and ML concepts and their applications. You will explore how AI has evolved from early research to powering today's most influential tech companies. This topic introduces you to the fundamentals while also highlighting how AI has created entirely new industries. You will gain insight into how careers in technology, entrepreneurship, and innovation are increasingly shaped by AI's capabilities and challenges.

Python for AI

Learn how to use Python, the primary programming language behind many AI systems. You will practise writing basic programs and apply them to small-scale AI projects. In San Francisco's start-up culture, Python is a cornerstone skill for anyone working in data science, software engineering, or product development. By learning it, you will see how technical skills translate into career opportunities, providing you with tools to participate in the fast-paced world of AI and innovation.

Data and AI

Explore how AI relies on data to generate insights and predictions. You will learn data preprocessing and visualisation skills, and see how clean, structured data supports successful AI systems. In San Francisco, where companies collect and process vast amounts of information, data analysis is critical for sectors like healthcare, social media, and consumer technology. This topic shows you how data-driven decision-making powers business growth and why data literacy is central to many future career paths.

Machine Learning Applications

Delve into the algorithms that drive machine learning and their real-world uses. You will experiment with supervised and unsupervised learning, understanding how models identify trends and provide solutions. San Francisco offers countless examples of machine learning in action, from self-driving cars to personalised recommendations. This topic will show you how these techniques open doors to careers in fields as varied as robotics, product design, and cybersecurity, making machine learning one of the most employable skills in today's workforce.

Neural Networks and Deep Learning

Study how neural networks allow AI to solve highly complex problems. You will examine how deep learning is used in natural language processing, image recognition, and decision-making systems. In San Francisco, where companies like Google, Meta, and OpenAI are pioneering these models, you will learn how deep learning is at the forefront of global innovation. This topic connects advanced AI concepts to real career pathways in software, research, and entrepreneurial ventures.

AI in Careers and Society

Consider how AI is transforming the world of work and society in the US and globally. You will look at the benefits AI brings, such as automation and efficiency, alongside the ethical and employment challenges it creates. With Silicon Valley as your backdrop, this topic explores the opportunities and risks of AI and how careers in this field are shaped not only by technical skills but also by creativity, responsibility, and awareness of social impact.

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