

uCertify

Course Outline

**Artificial Intelligence: Concepts, Industry
Applications & Ethics**



04 Aug 2025

1. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

2. Expert Instructor-Led Training

3. ADA Compliant & JAWS Compatible Platform

4. State of the Art Educator Tools

5. Award Winning Learning Platform (LMS)

6. Chapter & Lessons

Syllabus

Chapter 1: Preface

Chapter 2: Artificial Intelligence: How AI is Reshaping Life and Business

Chapter 3: Understanding Artificial Intelligence and Associated Technologies

Chapter 4: AI in the 'Bull' Run

Chapter 5: Data Engine of Artificial Intelligence

Chapter 6: Big Tech Bets Big on Artificial Intelligence

Chapter 7: AI Startups that Transformed Businesses

Chapter 8: AI Startups in Finance

Chapter 9: AI Startups in Healthcare

Chapter 10: AI Startups in Human Resources

Chapter 11: AI Startups in Fashion, Law, Agriculture and Other Areas

Chapter 12: Ethical, Social and Political Issues in AI

Chapter 13: Future of Artificial Intelligence

Chapter 14: Conclusion

Videos and How To

1. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule

2. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

3. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

4. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- 2020

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

5. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Preface

Chapter 2: Artificial Intelligence: How AI is Reshaping Life and Business

- Introduction
- AI and Robotics
- History of Development of Artificial Intelligence
- Lessons from the Technology Revolutions of the Past Three Centuries

- New Competitive Advantage of AI
- Hype and Reality of AI
- Want to Solve a Problem, Think AI
- Continuous Improvement
- Will AI Pose a Threat to Sapiens?
- Concluding Remarks

Chapter 3: Understanding Artificial Intelligence and Associated Technologies

- Artificial Intelligence
- General AI and Narrow AI
- Different Technologies under Artificial Intelligence
- What does AI involve?
- What AI can do?
- Specific Applications of AI
- Study of AI – A Multi- Disciplinary Approach
- AI and its Sub-sets
- What is Machine Learning (ML)?
- Reinforcement Learning
- Neural Networks—Study of Biological Neurons

- AI-powered Unmanned Aerial vehicles (Drones)
- Understanding Robotics
- Push for Robotization
- Internet of Things (IoT)
- Application of IoT
- Advantages of IoT
- Concluding Remarks

Chapter 4: AI in the ‘Bull’ Run

- Artificial Intelligence is making a Rapid Progress
- Stanford University Report shows AI is progressing fast
- GPU Performance Speedup
- Rising Budget for Digital Transformation
- Lead Indicators show AI in ‘bull’ run
- Rise in VC Funding
- Spurt in Merger and Acquisition activity in AI
- Patent Filings in AI Growing
- Earnings Call- New Favorite is AI and Machine Learning

- Indian AI startups are a tipping point
- Every Company wants to become Intelligent
- Demand for top talent in AI Skills
- Business Perception for Job-skilling
- Publications in AI Research
- Business Feedback on Impact of AI
- Engaging with AI is Top Priority for the Tech Industry
- Conclusion

Chapter 5: Data Engine of Artificial Intelligence

- Introduction
- Safeguards for Making Use of Data
- Data Security must be robust
- Policy Issues on Use of Data
- Big Players have big advantage, but why disturb them?
- Data ownership versus Control of Data
- Setting up a Data Authority
- Tim Burners Lee's Project for data Storage and Transaction
- HAT Project

- Conclusion
- Annexure to Lesson 4
- Sanctions

Chapter 6: Big Tech Bets Big on Artificial Intelligence

- Introduction
- Why Big Tech is betting big on AI
- What the US big tech companies are doing to Promote AI
- R&D Spend by the US based big tech companies
- Specifics of what the US Big Tech is doing
- Rise of China's Big Tech in AI
- Summary of what 3AFIM and ABJT are doing collectively
- Concluding Remarks

Chapter 7: AI Startups that Transformed Businesses

- Introduction
- Startups in different Industries
- Conclusion

Chapter 8: AI Startups in Finance

- Introduction
- New Technology Trends in AI for Fintech
- Key Fintech verticals and Startups
- Returns on Investments in AI
- AI-based Startups in Fintech
- Detailed study of a few AI Startups in Finance
- Benefits of AI in Financial sector
- Regulatory limitations of AI based solutions
- Conclusion

Chapter 9: AI Startups in Healthcare

- How AI is being applied in Healthcare
- AI Startups in Healthcare
- Advantages of AI in healthcare
- Limitations
- Conclusion

Chapter 10: AI Startups in Human Resources

- How AI Changes the recruitment process

- Advantages of AI in HR
- Limitations of AI in HR
- Conclusion

Chapter 11: AI Startups in Fashion, Law, Agriculture and Other Areas

- How AI Changes Fashion, Law and Agriculture et al
- AI in Fashion Retailing
- AI in Product Design
- AI and Analytics in Hospitality Industry
- Startups in Agriculture
- Startups in Law
- Startups in Conversational Platform
- Benefits of AI
- Conclusion

Chapter 12: Ethical, Social and Political Issues in AI

- Ethics of Intelligent systems
- Job Losses- the biggest worry in the rise of AI
- Billions got Employment thanks to Technological Inventions

- Human-Machine Team Up
- The Inequality arising out of AI
- Bias of Algorithms
- Monopoly of the Big Tech
- Concerns on Privacy
- Fake News and Fake Videos: Need for Regulation
- Issue of Cyber Security and Hacking
- Over-indulgence on Social Media and Gaming
- AI for Public Good
- Dangers of Autonomy to Machines
- Tyranny of the Authoritarian Governments
- Focus on how AI succeeds in the market place
- Conclusion

Chapter 13: Future of Artificial Intelligence

- How Current Technologies will expand
- How AI will emerge in longer term
- Can AI become Creative?

- Conclusion

Chapter 14: Conclusion

- Artificial Intelligence is set to Change our World
- Our Personal Lives set to Change
- Businesses are experiencing a Revolution
- Businesses must adopt everything Digital
- Benefits of AI to Businesses
- Benefits in Agriculture, Health etc. for the Larger Society
- Technology will keep improving
- AI creates National and International Competition
- Social and Ethical Issues
- Humans will remain relevant
- Get ready for an AI-society
- Manage the Unexpected Developments
- AI Growth Engine Must Keep on Rolling
- Concluding Remarks

You can't stay away! Get
in touch with our team to