Python is an easy to use, open-source and versatile programming language that is especially popular among those learning a programming language for the first time. The use of Python in industry has increased by a factor of 10 since 2005 and is on track to be more popular than the industry leading Java language in just a few years. It is already the number one software package for those teaching introduction to computer science courses. It is concise and easy to read, and can be used for a variety of industry needs including web development, data analytics, core software development and a wide range of scientific and mathematical applications.

Python also has numerous libraries for data manipulation and analysis as well as a very active development community that continually updates and creates new packages. It has been adopted by a wide variety of industries and applications including data science, machine learning, data analytics, predictive analytics, business intelligence and web analytics.

In this short specialized study program students will learn Python programming concepts including programming styles, idioms, libraries, data structures, data retrieval, processing, visualization, networked application program interfaces and databases. Students can then choose from a final course in either Introduction to Python for Data Analysis or Developing Web Services and Accessing Web Data with Python.

University of California, Irvine
ce.uci.edu/python
WHO SHOULD ENROLL
Beginning and intermediate programmers and those in the data science, data analytics, machine learning, GIS analytics, web development, software development and QA, UX/UI design, engineering, business analyst fields wishing to update and improve their professional skills should enroll.

PROGRAM BENEFITS
• Great entry point for those new to programming
• Learn to program using a popular language that is fast, free, easy to use, and runs on all major hardware platforms
• Learn the language of choice for high-demand job fields such as data science, machine learning, predictive analytics, big data and accessing web data.
• Code using efficient Python scripting, syntax tools, and object-oriented coding theories
• Create user-defined functions and utilize a vast array of built-in functions
• Learn how to reduce development and debugging time using Python
• Learn the language that is the next “Big Thing” and a must for professionals in the data analytics and Web development domains.
• Create applications for analytics, web and systems development

CERTIFICATE ELIGIBILITY AND REQUIREMENTS
A specialized studies award is provided upon completion of 9 credit units (6 required and 3 elective units) with a grade point average of “C” or better in each course, within 5 years. Students not pursuing a specialized studies award are welcome to take as many individual courses as they wish.

PROGRAM FEES
Actual fees may differ from the estimate below. Fees are subject to change without prior notice.
Course fees (6 required and 3 elective units) $3,585
Candidacy fee $35
Textbooks $100
Total Estimated Cost $3,720

TO ENROLL
Visit ce.uci.edu/python for full course descriptions, instructor biographies, and enrollment information.

IEEE Members receive 15% off of one course per quarter.
IEEE computer society

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