INSTRUCTOR
INTERNATIONAL & ENGLISH LANGUAGE PROGRAMS

JOB DESCRIPTION

The University of Washington (UW) is proud to be one of the nation’s premier educational and research institutions. UWC², the continuing education branch of the University of Washington, has been building bridges between the UW and communities across the globe since 1912.

International & English Language Programs, one of UWC²’s units, has an outstanding opportunity for up to two Part-time Lecturers within its new customized Big Data program. Class sessions meet Monday through Friday and will be located mostly on the UW Seattle campus and once per week at the Puget Sound Plaza. One selected program instructor will receive additional compensation to create course curriculum prior to the start of the program.

Position Titles:

1. Introduction to Data Engineering Lecturer, Part-Time, Customized Program (up to two* positions)

2. Introduction to Data Engineering Curriculum Developer, Part-Time, Customized Program (one position)

Appointment Period: Summer quarter 2018 (Program dates are July 23-August 10)

Eligibility: Open; final selection(s) made by April 12, 2018

Closing Date: Please apply by April 6, 2018

Salary: Lecturer only: $5,850
Curriculum developer (must be combined with Lecturer position): $2,000

The Introduction to Data Engineering course is part of a three-week customized Big Data summer program for up to 60* visiting university students from China. The program includes a separate 10-hour Presentation Skills for STEM course in addition to this data engineering course. Students who complete this program should be able to speak confidently about technology-related issues and concepts as well as analyze current practices. The program includes a culminating lecturer-led project related to big data.

Students selected for this program will have some prior experience studying computer science or data analytics, though may not necessarily have a background in data engineering. They will be 18 years of age or older and be fairly competent in English. Students will be expected to follow all course content without requiring any tailoring to language proficiency levels.
The summer quarter lecturer position includes 45 class hours between July 24-August 10 with 36 class hours and 9 hours of site visits combined occurring between 9:30 am-12:30 pm daily, Monday-Friday (except one site visit, scheduled for Tuesday, July 24 from 2:30-5:30 pm).

*Two lecturers will be hired in the event of a group size over 30 students.

Lecturer Commitment and Responsibilities:

- Deliver lectures for each class using specific course curriculum developed by the curriculum developer (below)
- Select, plan, and lead three active site visits, to sites on the UW campus or in the Seattle metro area relevant to the program theme (at least one site visit not on the UW campus)
- In the event of a group size of more than 30 students, regularly collaborate with other lecturer to ensure all students receive the same content and quality of experience throughout program
- Grade and formally submit grades for all student assignments, including any group work and final projects
- Attend all program planning meetings (to be scheduled once all teaching positions are filled)
- Attend program welcome event (July 23, 10:00-10:30) and program closing event (August 10, 1:30-3:00pm)
- Complete course debrief survey

Curriculum Developer Responsibilities:

- Collaborate with program director and UWC² IT administrators to select appropriate cloud computing lab resources for the course
- Create and share lesson plans, lectures and activities for each class; organize course content to fit appropriately into the short program format
- Research and suggest a variety of possible active site visits to sites on the UW campus and in the Seattle metro area relevant to the program theme
- In the event of a group size of more than 30 students, ensure that other lecturer receives and understands course curriculum well before the start of the course in order to provide the same content and quality of experience throughout program
- Provide UWC² program director with completed curriculum prior to start of program and all curriculum modifications at conclusion of program
- Provide Presentation Skills lecturers with access to course materials prior to start of program

  - Curriculum includes:
    - Syllabus template and curriculum page
    - Course scope and sequence
    - Course calendar
    - Daily lesson plans (can be combined with calendar)
    - Lecturer course guide
    - Materials and assessment rubric
**Minimum Qualifications:**

- Completed MA, MS, PhD in progress or PhD with degree related to program theme
- Teaching experience, including leading hands-on activities and research projects
- Excellent organizational and decision-making skills
- Excellent oral and written communication skills
- Experience working/interacting with students from non-U.S. cultures

**Lecturer Compensation:**

$5,850 paid over summer quarter 2018. Salary is distributed according to UW dates and procedures.

**Curriculum Developer Compensation:**

$2,000 paid in lump sum upon receipt of completed and approved curriculum deliverables to UWC² program director.

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**COURSE DESCRIPTION**

**Introduction to Data Engineering**

This non-credit course is designed to be relevant to international students interested in future work in the field of big data. There is a growing need for specialists who know how to design and build platforms that can handle the enormous amount of data available today. The course meets daily for three hours, four days per week. This class must include 36 hours of lecture plus three active site visits (approximately nine hours of scheduled class time) selected at the discretion of the program lecturer, to sites on the UW campus or in the Seattle metro area that are relevant to the program theme. Some example site visits may include the Washington Research Foundation (WRF) Data Science Studio, the UW eScience Institute, Amazon GO Beta Site, Inrix, DS-IQ, or others that the lecturer considers appropriate. In this course, students will also complete an lecturer-led project related to the management of big data that aims to bring together all aspects of the course. Specifically, this course will cover:

- Essential concepts of big data engineering, including distributed data storage and processing for analytical and streaming applications
- Data stacks, their uses, advantages and limitations
- Background of distributed systems, relational databases and key-value stores
- SQL and NoSQL; Batch processing vs. in-memory vs. massively parallel processing
- Introduction to Hadoop and similar software frameworks
- Overview of available tools for data management, data access, governance and integration, operations, and security

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**APPLY TO TEACH**
Electronic applications must include a cover letter outlining your interest in pursuing this position, along with a current resume or curriculum vitae to:

Position Selection Committee
ISPinfo@uw.edu
No phone calls will be accepted.

Please put the words Introduction to Data Engineering in the subject line of your email, and specify in your cover letter if you are interested in both teaching and curriculum design or only teaching.

The University is an affirmative action, equal opportunity employer. To build on a culturally diverse faculty and staff we strongly encourage applications from women, minorities, individuals with disabilities and covered veterans.

Thank you for your interest in this position.