



UNIVERSITY of HAWAII®  
**HAWAII**  
COMMUNITY COLLEGE

# GeoSpatial Technologies Certificate

***An accelerated way to enhance work-related skills for employees!***

*Providing our students a learning environment that will allow them to gain knowledge and hands on skills in GeoSpatial Technologies. Geospatial Technology refers to software and field equipment used in visualization, measurement, and analysis of earth's features, typically involving such systems as GPS (global positioning systems), GIS (geographical information systems), and RS (remote sensing). Its use is well-known and widespread in the military and in homeland security, but its influence is pervasive everywhere, such as land use, flood plain mapping and environmental protection. Learn to make smart and effective decisions in land use, development, and conservation.*

- ➔ Computer Aided Drafting (CAD)
- ➔ Survey Data Collection
- ➔ Building Information Modeling (BIM)
- ➔ Building Services
- ➔ Geographical Information Systems (GIS)
- ➔ Global Positioning Systems (GPS)

## CLASS SCHEDULING

**The following courses are all 8-weeks.**

**Summer, May 18 -July 8, 2015 or Fall, August 24 - October 16, 2015** (class dates may change)

### **AEC 197B – Computer Aided Drafting (CAD)** (3credits) online\*

Designed for students interested in CAD drawing. This course is designed for the student with no CAD experience. Introduction to AutoCAD's basic drawing commands will be the focus including features, functions, and operations. Students will also learn how to create blocks, external references, and how to utilize paper and model space layouts.

### **AEC 197C – Geomatics & Land Surveying I** (3 credits) hybrid\*

Introduction to Geomatics and Land Survey science, terminology, field practices, equipment, hardware, and software for measuring, locating, and mapping geographic features on the face of the earth. Students will learn how to setup survey field equipment and notes for turning and measuring horizontal and vertical angles and distances from a known reference baseline. Survey data will be collected and analyzed for input into CAD or other survey office software.

**Fall, Oct 19 - Dec 11, 2015** (second session) (class dates may change)

### **AEC 198C - Introduction to GIS & GPS** (4 credits) hybrid\*

GIS (Geographic Information Systems) is a computer-based tool that uses spatial (geographic) data to analyze and solve real-world problems. This course is designed to introduce the student to the principles and techniques of GIS. The lab material will emphasize GIS data collection using GPS (Global Positioning System), entry, storage, analysis, and output using ArcGIS Desktop software.

### **AEC198D – Building Services & BIM** (3 credits) hybrid\*

*Prereq: Successful completion of 197B & 197C*

Preliminary and detail planning of service and mechanical equipment and facilities in multi-family and/or commercial buildings. Topics include energy, thermal control, plumbing and electrical systems, and vertical transportation equipment. This course will also introduce students to the concepts and software used when creating a Building Information Model (BIM).

\*Online courses are delivered 100% online. Hybrid courses include both in-class and online modules.



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**For more information please go to:**

<http://hawaii.hawaii.edu/programs-courses/> or <http://hawaii.hawaii.edu/rh/>  
We look forward to answering any questions you may have. Please contact us at:  
(808) 934-2689 or email us at: [myfuture@hawaii.edu](mailto:myfuture@hawaii.edu)

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For inquiries or complaints concerning our non-discrimination policies, please contact: Disabilities Counselor, Section 504 Coordinator (808-934-2725, Hawaii CC Bldg. 388-Room 106) or Vice Chancellor for Student Affairs, Title IX Coordinator (808-934-2509, Hawaii CC Bldg. 378).