Course Outline

COURSE: AMT 232  DIVISION: 50  ALSO LISTED AS: 

TERM EFFECTIVE: Fall 2019  CURRICULUM APPROVAL DATE 05/14/2019

SHORT TITLE: DRONES BUSINESS/INDUSTRY

LONG TITLE: Drones in Business and Industry

<table>
<thead>
<tr>
<th>Units</th>
<th>Number of Weeks</th>
<th>Contact Hours/Week</th>
<th>Total Contact Hours</th>
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<tbody>
<tr>
<td>3</td>
<td>18</td>
<td>Lecture: 3</td>
<td>Lecture: 54</td>
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<td>Lab: 0</td>
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<td>Total: 3</td>
<td>Total: 54</td>
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COURSE DESCRIPTION:

This course will provide individuals with information on how to start a drone business as well as the types of business and industry opportunities that are available with drones. The ethical implications of drone use will also be discussed. This class is designed for those entrepreneurs looking to start their own drone business.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: C - Credit - Degree Non Applicable

GRADING MODES
- L - Standard Letter Grade
- P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:
- 02 - Lecture and/or discussion
- 05 - Hybrid
- 72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:
1. List and describe 5 different types of drone business applications and the setup required to create a successful business
2. Analyze the feasibility of starting a drone business from start to finish.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date 05/14/2019

15 Hours
1) Introduction - Rapid Growth in Industrial Drone Applications
2) FAA - Regulations Related to the Operation of Drones, Certification Required
3) Trends - Business Applications
4) Ethics – Privacy Rights

Student Performance Objectives: State the requirements needed to operate a drone. Explain the FAA regulations required to pilot a commercial drone. Discuss the latest research related to gearing up for a drone-powered economy. Identify the ethical implications of drone use.

19 Hours
5) How to Start a Drone Business - Investment, Drone Training, Workflow
6) Data Processing - Sensors, Gathering Data

Student Performance Objectives: Describe the investments required and the training needed to begin a drone business. State the possible obstacles to commercial drone operations. Explain the workflow setup needed to create a successful business. Discuss the type of drone and sensors recommended based on the drone application. Discuss data processing including formatting your data into a report.

18 Hours
7) Types of Businesses - Industrial Uses of Drones, Business Applications

Student Performance Objectives: List and describe 10 business applications using drones. Select 1 or 2 applications and discuss how they might "fit" you.

2 Hours

METHODS OF INSTRUCTION:
lecture, discussion, AV presentation

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours: 21
Assignment Description: Read related chapters in the textbook. Answer study guide questions. Report: Investigate the latest research related to the trends in a drone-powered economy and report back to the class. OR Summarize the FAA changes that have led to the current rapid growth in industrial drone applications and report back to the class. OR Investigate the latest regulations related to the ethical use of drones.

Required Outside Hours: 40
Assignment Description: Study for exam. Read related chapters in the textbook. Answer study guide questions. Homework: Research the type of drone and sensors required for a start-up drone business of your choice and write a 1 - 2 page paper. Come prepared to discuss this information with the class. OR Determine the data processing, including formatting your data into a report, for a start-up drone business of your choice and write a 1 - 2 page paper. Come prepared to discuss this information with the class.

Required Outside Hours: 47
Assignment Description: Study for exam. Read related chapters in the textbook. Answer study guide questions. Report/Presentation: Select a hypothetical drone business application and develop a plan to bring this business to fruition, including recommended drone type and sensors and workflow-setup to create a successful drone business. If time allows, report your findings to the class.
METHODS OF EVALUATION:
Writing assignments
Percent of total grade: 10.00 %
Homework
Problem-solving assignments
Percent of total grade: 40.00 %
Report, Presentation
Objective examinations
Percent of total grade: 30.00 %
Written exam
Other methods of evaluation
Percent of total grade: 20.00 %

REPRESENTATIVE TEXTBOOKS:
ISBN: 10: 0578132036
Reading Level of Text, Grade: 12th Verified by: MS Word

ARTICULATION and CERTIFICATE INFORMATION
Associate Degree:
CSU GE:
IGETC:
CSU TRANSFER:
Not Transferable
UC TRANSFER:
Not Transferable

SUPPLEMENTAL DATA:
Basic Skills: N
Classification: Y
Noncredit Category: Y
Cooperative Education: N
Program Status: 1 Program Applicable
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department:
CSU Crosswalk Course Number:
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: C
Maximum Hours:
Minimum Hours: