Unmanned Aircraft Systems (Construction Inspection Emphasis)

Contact Information
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Delivery Methods
Face-to-Face: Wahpeton
Online: Some classes

Course Code | Course Title | Credits
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ARCT 131 | Construction Methods & Materials I | 3
ARCT 231 | Construction Methods & Materials II | 3
AST 103 | Autonomous Sensing Systems | 2
BCT 140 | Intro to Print Reading | 2
BCT 220 | Project Supervision | 3
BCT 240 | Commercial Print Reading | 3
CMT 150 | Construction Document Management | 2
CMT 225 | Mechanical and Electrical Systems | 2
CMT 251 | Construction Documents and Specifications | 3
CMT 253 | Construction Scheduling | 3
CT 111 | Civil Plans and Specifications | 2
CT 132 | Material Testing/Quality Control | 3
RAMT 101 | Applied DC Theory | 4
UAS 111 | Introduction to UAS | 2
UAS 112 | Unmanned Aircraft Systems Certification | 2
UAS 121 | Data Collection I | 2
UAS 122 | Photography and Videography | 2
UAS 132 | Advanced Flight I | 2
UAS 221 | Data Collection II | 2
UAS 222 | Data Collection III | 2
UAS 223 | UAS Capstone Project | 2
UAS 232 | Advanced Flight II | 2

The Unmanned Aircraft Systems Associates of Applied Science (AAS) degree program is designed to prepare students with the knowledge and ability to use various types of unmanned aircraft systems, the legal guidelines for operating UAS in a commercial environment, preflight planning, how to pilot UAS and collect data using various types of sensors, process the data, analyze and understand the data related to a specific discipline. Students will utilize high resolution cameras, thermal imaging sensors, LiDAR, and other sensors for collecting various types of data and then learning to process and analyze that data.

With the Construction Inspection Emphasis, students will take courses, so they are knowledgeable of construction practices, construction specifications, printing reading, construction document management, material testing, and quality control practices.

Graduates will have a broad range of knowledge of the construction industry which will allow them to pursue a career working for contractors, architectural firms, engineering firms, or drone service providers to conduct construction related inspections.

Green and/or sustainable construction is covered at an awareness level in the methods and materials classes.

NOTE: This program requires a ZBOOK 15 Laptop or equivalent. Please refer to the NDSCS website for specifications. The cost will be approximately $2100.00 if purchased through NDSCS. For further information, call Seth Simonson, at 701-671-2116.

Admission Requirements*
The applicants must be high school graduates or equivalent. Students considered for acceptance must complete all admission requirements.

Please Note: Students are placed into English, math and reading courses based on ACT, ACCUPLACER or other nationally recognized tests. Please see www.NDSCS.edu/current-students/student-success/test-center for the NDSCS Course Placement Policy and testing information. Students may be on an extended plan of study pending their course placement.

*Program Admission Requirements are subject to revision. Please check the department or program website under Program Admission Requirements for current information.

Award
Upon successful completion of the required courses, students will be awarded an Associate in Applied Science degree in Unmanned Aircraft Systems with an emphasis in Construction Inspection.