

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW/CHANGE PROGRAM REQUEST</b> <b>Undergraduate Programs</b>	UUPC Approval <u>1/30/23</u> UFS Approval _____ Banner _____ Catalog _____
	<b>Department</b> Civil, Environmental and Geomatics Engineering  <b>College</b> Engineering and Computer Science	
<b>Program Name</b> Certificate in Surveying and Mapping	<input type="checkbox"/> <b>New Program*</b>  <input checked="" type="checkbox"/> <b>Change Program*</b>	<b>Effective Date</b> (TERM & YEAR)  Fall 2023
<b>Please explain the requested change(s) and offer rationale below or on an attachment.</b>  Change SUR 4331 (2 credits) and SUR 4331 L (1 credit) to a combined 3-credit course SUR 4331C. All lab exercises are software based and it will best serve the students in the combined mode.		
<small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small>		
<b>Faculty Contact/Email/Phone</b>  Sudhagar Nagarajan, snagarajan@fau.edu/7-3104	<b>Consult and list departments that may be affected by the change(s) and attach documentation</b>	
<b>Approved by</b> Department Chair _____ <i>ekaisar</i> College Curriculum Chair <u>Hongbo Su</u> <small>Digitally signed by Hongbo Su DN: cn=Hongbo Su, o=FAU, ou=FAU, email=fau.edu, c=US Reason: I am the author of this document Location: your signing location here Date: 2023.01.09 15:16:49-0500 Soft Reader Version: 10.1.1</small> College Dean _____ UUPC Chair _____ <i>Ehlyn Williams</i> Undergraduate Studies Dean _____ <i>Dan Meeroff</i> UFS President _____ Provost _____	<b>Date</b> _____ 01/06/2023 _____ 01/09/2023 _____ <u>1/9/23</u> _____ <u>1/30/23</u> _____ <u>1/30/23</u> _____ _____	

Email this form and attachments to [mjenning@fau.edu](mailto:mjenning@fau.edu) seven business days before the UUPC meeting.

### Surveying and Mapping Certificate

The Department of Civil, Environmental and Geomatics Engineering offers undergraduates a certificate in Surveying and Mapping. Students are entitled to the certificate by completing a minimum of 12-credits of coursework with a grade of "C" or better. Selected courses must be checked for the proper prerequisites. The certificate is open to both degree-seeking and non-degree-seeking students.

Required Courses (3 credits)		
Geomatics (1)	SUR 3103	2
Geomatics Lab (1)	SUR 3103L	1

Select additional courses from below for a minimum of 9 credits		
Digital Photogrammetry Principles and Applications (2)	SUR 4331C	3 2
<del>Digital Photogrammetry Principles and Applications Lab (2)</del>	<del>SUR 4331L</del>	4
Automated Surveying and Mapping (2)	SUR 3141	2
Automated Surveying and Mapping Lab (2)	SUR 3141L	1
Geodesy and Geodetic Positioning (4)	SUR 4530	2
Geodesy and Geodetic Positioning Lab (4)	SUR 4530L	1
Measurement Theory and Data Adjustments (3)	SUR 3520	3
Engineering and Construction Surveying (4)	SUR 3205	2
Engineering and Construction Surveying Lab (4)	SUR 3205L	1
Cadastral Principles and Legal Aspects	SUR 4403	3
Thermal Infrared Remote Sensing and Applications	SUR 4384	3
Principles of Geographic Information System	GIS 4043C	3
Introduction to Laser Mapping Technology	CCE 4514C	3