

## Certificate

# Mission Analysis and Engineering Certificate

The graduate certificate in Mission Analysis and Engineering provides students and professionals with the necessary understanding to manage engineering and systems engineering activities such that mission supporting capabilities are achieved in even the most complex conditions. The program is designed to elevate understanding of the difficulties that are endemic to working with complex, socio-technical systems, or system of systems, in extremely transient and uncertain situations. It provides the student with the opportunity to hone planning, decision-making, and/or execution skills necessary to work transformational environments. It is recommended that students intending to take the certificate contact the certificate director to develop a plan of study that will most benefit the student's goals.

Transferability of courses: The certificate is listed as a graduate certificate by the State Council for a higher Education in Virginia. The program offers "for-credit", graduate-level, courses listed in the Old Dominion University Graduate Catalog. Courses taken for the certificate may be used towards graduate studies with approval of the student's Advisor or Graduate Program Director. Non-degree seeking students completing the certificate may later apply the credit hours earned towards graduate degrees in engineering and other disciplines with approval of the Graduate Program Director of the program to which the student has been admitted or is seeking admission.

## Admission Requirements

All degree-seeking applicants admitted to the certificate program must meet ODU requirements for graduate admission: an earned baccalaureate degree from a regionally accredited institution or an equivalent degree from a foreign institution in engineering or engineering technology is required. Those whose native language is not English must submit a minimum score of 230 on the computer based TOEFL or 80 on the TOEFL iBT. Non-degree seeking students are required to have these same credentials, though documentation is not required. Ultimately, students must apply to the certificate program in order to obtain the certificate.

## Curriculum Requirements

<b>Required Courses</b>		<b>6</b>
ENMA 650	Mission Analysis and Engineering	3
ENMA 750	System of Systems Engineering	3
<b>Elective Courses</b>		<b>6</b>
ENMA 660	Systems Architectures	3
ENMA 715	Systems Analysis	3
ENMA 755	Human System Engineering	3
ENMA 777	Complex System Governance	3
<b>Total Hours</b>		<b>12</b>