**College of Sciences**

**Human Factors Psychology Certificate in Modeling and Simulation**

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Description of Certificate

Human factors is a discipline in which principles of cognition, information processing, learning, and perception are applied to the design of technology. Knowledge of human factors helps create a better match between user capabilities and system demand. Further, an understanding of human capabilities helps designers generate more veridical models of human behavior. Applying principles of human factors can create more effective simulator training systems. This modeling and simulation certificate provides students with a focus on psychological principles that address end-user capabilities with models of human behavior and with knowledge/skill acquisition.

This certificate is designed for graduate students in psychology who are interested in pursuing a career in modeling and simulation or for doctoral students who wish to focus on human factors issues in modeling and simulation It is anticipated that students will complete the program in 2 semesters (full time enrollment) or 2 years (part-time enrollment or working to complement a graduate degree).

Admissions:

Requirements for this program include a strong background in basic and applied areas of psychology as well as quantitative research methods. All applicants admitted to the certificate program must meet ODU requirements for admission to a graduate program in psychology—holding a baccalaureate or master’s degree from a regionally-accredited institution or an equivalent degree from a foreign institution.

Curriculum Requirements:

*Core Course*

MSIM 601 Introduction to Modeling and Simulation

*Foundation Courses*

PSYC 731/831 Human Cognition

PSYC 741/841 Sensation and Perception

PSYC 770/870 Human Factors

*Total Hours 12*