HUMAN SYSTEMS INTEGRATION
COURSEWORK

- Introduction to HSI
- HSI in the Acquisition Process
- HSI Tools, Techniques, Approaches and Methods
- HSI Case Studies and Applications
- Cost Estimation
- Systems Acquisition
- Systems Engineering
- Human Factors Engineering
- Research Methods
- Applied Statistics
- Individual & Team Performance
- Anthropometry & Biomechanics
- Macroergonomics
- Manpower and Personnel
- Organizational Behavior
- Personnel Selection
- System Safety, Survivability, Habitability, & Health Hazards
- Test & Evaluation
- HSI Capstone Project

Eligibility

The following individuals are eligible for this degree program:

- US Military
- US Government Civilians
- International Students who are accepted to NPS
- DoD Contractors (on a space available basis)

CONTACT INFORMATION

Human Systems Integration (HSI) Curriculum

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HSI programs at NPS
www.nps.edu/or/hsi

Distributed Learning (DL) programs at NPS
www.nps.edu/dl

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HUMAN SYSTEMS INTEGRATION
DISTANCE LEARNING MASTER'S DEGREE PROGRAM

For All Federal Government Personnel

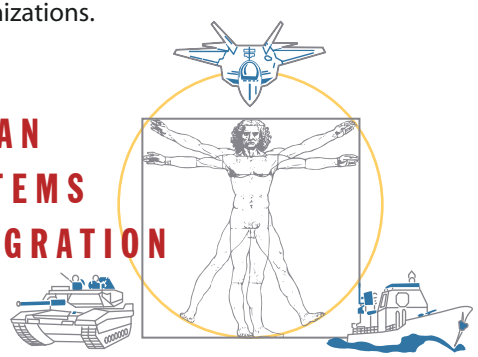
Program Starts Each Fall Quarter

NAVAL POSTGRADUATE SCHOOL

HSI And You

HSI

Human Systems Integration (HSI) acknowledges that the human is a critical component in any complex system. It is an interdisciplinary approach that makes explicit the underlying tradeoffs across the HSI domains, facilitating optimization of total system performance in both non-materiel and materiel solutions to address the capability needs of organizations.



HSI Program Mission

The HSI program at NPS provides graduate education and training to military and civilian personnel, giving them the knowledge, skills, and abilities needed to be effective leaders in the assessment, design, testing, and management of the total system throughout the acquisition life cycle.

Faculty

HSI faculty are widely published and actively engaged in teaching and research. Faculty span the disciplines of Human Factors, Operations Research, Systems Engineering, Computer Science, Manpower, Personnel, Training, and Business Management.

HSI DOMAINS

Manpower

The number and composition of people who operate, maintain, support, and provide training for the system.

Personnel

Selection of individuals with appropriate knowledge, skills, and abilities required to perform as operators, maintainers, or support personnel.

Training

Instruction, education, and training required to provide personnel with the knowledge, skills and abilities required to operate and maintain systems.

Human Factors Engineering

Optimize human-machine performance through effective system design.

Human Survivability

System design features and personal protective equipment that enhance force protection and decrease fratricide.

Health Hazards

Identify and mitigate operating characteristics and systems design features that decrease worker performance and create significant health risks.

System Safety

Effective operation and maintenance of a system without harm to the system or personnel.

Habitability

The qualities of the physical living environment and support services that lead to mission effectiveness.

Prerequisites

Applicants must satisfy the following requirements (waivers can be granted):

- Baccalaureate degree
- Undergraduate GPA of 2.2 or better
- Lower level calculus sequence with C or better average
- Completion of DAU ACQ 101 and ACQ 201A

Academics

Students take two graduate courses per quarter for eight quarters. Graduates are awarded a Master's degree in Human Systems Integration (MHSI).

Certification

NPS HSI graduates receive certifications from the Defense Acquisition University (DAU) in Acquisition (ACQ 101, ACQ 201A, ACQ 201B), Program Management (PMT 251, PMT 256), Systems Engineering, and Test and Evaluation (TST 203). Graduates also receive a certificate in HSI from NPS.

Examples of Applied Research in HSI at NPS

- Capabilities based assessment of USAF critical care air transport
- Habitability tests of amphibious vehicles
- Effects of fatigue and operational stress on military performance.
- Reduced and optimal manning strategies for the Littoral Combat Ship.
- The effects of motion on human performance and system effectiveness.

INTEGRATION