

# HACS - ACES- CYBERSECURITY

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## **HACS402 Applied Security Analysis and Visualization (3 Credits)**

Focuses on exploratory and statistical data analysis, data and information visualization, and the presentation and communication of analysis results. These topics will be presented and explored in the context of and with applications to cybersecurity related data.

**Restriction:** Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

## **HACS408 Advanced Seminar in Cybersecurity (3 Credits)**

Explores various lenses of cybersecurity in order to promote an interdisciplinary understanding of the field. Although each section may focus on a different topic, each integrates active student engagement, communication, critical communication, critical thinking, and teamwork.

**Restriction:** Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program.

**Repeatable to:** 9 credits if content differs.

## **HACS479 Undergraduate Research in Cybersecurity (1-3 Credits)**

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in research in order to gain greater insight into a specific area within cybersecurity, obtain an appreciation for the subtleties and difficulties associated with the production of knowledge and fundamental new applications, and to prepare for graduate school and the workforce.

**Restriction:** Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

**Repeatable to:** 6 credits if content differs.

## **HACS498 Cybersecurity Group Problem Solving (3 Credits)**

The Advanced Cybersecurity Experience for Students (ACES) program encourages its students to engage in team problem solving activities in order to gain greater insight into a specific area within cybersecurity and to obtain an appreciation for the subtleties and difficulties associated with these activities in order to prepare students for graduate school and the workforce. Students engage in a semester long problem solving or development project under the mentorship of a industry specialist and with the guidance of university faculty. Through the exercise the students will develop teamwork experience and professional communication skills in addition to experience of the project itself. The project might be evaluation, creation, testing or analysis of some area of cybersecurity as needed by the mentor-sponsor. A contract of what will be accomplished is required must be agreed upon by the mentor, the student and the ACES leadership before the project can begin.

**Restriction:** Must be a student in the ACES (Advanced Cybersecurity Experience for Students) Minor Program; and permission of UGST-HCOL-ACES Cybersecurity Program.

**Repeatable to:** 6 credits.