Bicoastal Mobility and Information Security Program

Students in the bicoastal program divide their studies between Carnegie Mellon’s Pittsburgh and Silicon Valley campuses. The unique combination of rigorous technical topics, practical industry-oriented topics, and real-world project experience empowers students to be the movers and shakers of the tech industry, whether launching a tech start-up, joining an enterprise R&D team, or fighting cyber-crime. The program is ideally suited for computer science and electrical and computer engineering students.

Choose from two degree options:

**MOBILITY**

**INFORMATION SECURITY**

Industry Exposure
Combining the rich, academic setting of Carnegie Mellon’s main campus with hands-on industry experience in the heart of Silicon Valley, bicoastal students have the best of both worlds. By participating in hackathons, attending industry workshops and networking with leaders in the field, these students gain unparalleled exposure in the nation’s top tech hub.

Practicum Project
Bridging the gap between theory and practice, the practicum is a project-based capstone course for bicoastal students. Teams tackle problems, pilot new ideas and develop solutions for sponsors in computing, mobile systems and security.
# Bicoastal Program Curriculum Framework

## Degree Options: Mobility and Information Security

NOTE: 14-513 is a required prerequisite for a number of systems core courses. We strongly recommend that all students take 14-513 in the first fall semester.

### 36 units

#### SHARED CORE COURSES
Of the 36 units of core courses, 12 units are management courses.

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<tr>
<th>Units</th>
<th>Course Details</th>
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| 12 units | **14-740: Fundamentals of Telecommunications & Computer Networks** *(FALL or SPRING)*  

or  

**15-641: Computer Networks** *(FALL)*  

or  

**18-756: Packet Switching and Computer Networks** *(FALL)* |

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<th>Units</th>
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<tr>
<td>12 units</td>
<td><strong>14-741: Introduction to Information Security</strong> <em>(FALL, First Year)</em></td>
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<tr>
<td>12 units</td>
<td><strong>14-776: Fundamentals of Business and Management</strong> <em>(FIRST FALL or FIRST SPRING)</em></td>
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### 48 units

#### DEGREE-SPECIFIC CORE COURSES
Degree-specific core courses allow students to specialize their degrees in Information Security or Mobility.

Please refer to the INI website's Course List page. While we created a list of possible courses, it is not exhaustive and students are allowed to select other degree-specific course courses as long as they are relevant to their degree. If a student wants to pursue a course that is not included on the approved list, they should file a petition requesting permission to do so.

### 36 units

#### RESTRICTED ELECTIVES
Students have the opportunity to pursue a wide range of electives in which they have a special interest. Restricted electives may not be taken as pass/no pass/audit.

Students can select any approved courses in the Heinz College or the Tepper School of Business --AND/OR-- any courses* in ECE, EPP, the School of Computer Science, INI, or III (49-xxx) that are numbered 300 and above. Visit the INI website for additional information. *Some exceptions apply.

### 24 units

#### MASTER’S PRACTICUM COURSE

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| 14-798: INI Practicum Project *(FALL)*  

In the practicum project, a team of students works with an industry, government or research sponsor on a real-world problem of value to the client. It provides the opportunity to apply the team’s advanced engineering and management skills developed in previous coursework in a team-based approach to a project.  

In particular, team members must learn to work effectively with clients, quickly understand their problem, negotiate deliverables and then select, adapt and apply just the right amount of process and documentation to meet clients’ needs and effectively manage the project. |

### 0 units

#### INTERNSHIP
All students must complete an INI-approved internship.

### 0 units

#### RESIDENCY REQUIREMENT
Beginning with the second fall semester, students must complete the remainder of their program in residency at the CMU Silicon Valley campus.

### 144 units

#### Total

Disclaimer: Information and offerings are subject to change. Please refer to www.cmu.edu/ini and the student handbook for complete curriculum information.