HEALTHCARE SYSTEMS ENGINEERING, MASTER OF SCIENCE

Admission Requirements

General admission requirements for master’s degree candidates and others seeking graduate status are as follows: applicants must be in the last semester of undergraduate study or hold a bachelor’s degree from a regionally accredited college or university.

In addition, applicants for the Master of Science in Healthcare Systems Engineering must have a prior educational experience that includes an undergraduate major in engineering, the sciences, or in healthcare. Applicants typically have earned a grade point average of at least 3.0 on a 4.0 scale (B or above) in the latter half of their undergraduate studies. Transcripts from all college studies must be submitted. When reviewing an application, the candidate’s academic and professional background will be considered. Applicants will typically have at least two years’ experience in engineering or the healthcare field. A detailed professional experience résumé must be submitted.

Program Requirements

In order to earn a Master of Science in Healthcare Systems Engineering, the student must complete 30 credits, approved by an advisor, within five years. The curriculum consists of six required core courses (18 credits) and 12 credits of electives. Subject to advisor approval, an elective may be substituted for a required course if the student has previously completed an equivalent graduate-level course. With the permission of an advisor, the student may be able to select a relevant elective not listed below. Only one grade of C can count toward the master’s degree. All course selections are subject to advisor approval.

Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EN.655.662</td>
<td>Intro to Healthcare Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>EN.655.667</td>
<td>Management of Healthcare Systems Projects</td>
<td>3</td>
</tr>
<tr>
<td>EN.655.767</td>
<td>Healthcare System Conceptual Design</td>
<td>3</td>
</tr>
<tr>
<td>EN.655.768</td>
<td>Healthcare System Design &amp; Integration</td>
<td>3</td>
</tr>
<tr>
<td>EN.655.769</td>
<td>Healthcare System Test and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EN.655.800</td>
<td>Healthcare Systems Engineering Capstone Project</td>
<td>3</td>
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<th>Credits</th>
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<tbody>
<tr>
<td>PH.140.611</td>
<td>Statistical Reasoning in Public Health I (3 BSPH credits/2 EP credits)</td>
<td>3</td>
</tr>
<tr>
<td>PH.221.654</td>
<td>Systems Thinking in Public Health: Applications of Key Methods and Approaches</td>
<td>3</td>
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Bloomberg School of Public Health online offerings

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>PH.309.631</td>
<td>Population Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>PH.309.730</td>
<td>Patient Safety and Medical Errors</td>
<td>3</td>
</tr>
<tr>
<td>PH.312.633</td>
<td>Health Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>PH.315.700</td>
<td>Health Information Systems: Design to Deployment</td>
<td>3</td>
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<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.315.707</td>
<td>Introduction to Biomedical and Public Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>PH.315.708</td>
<td>Hit Standards and Systems Interoperability</td>
<td>3</td>
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<tr>
<td>PH.600.711</td>
<td>Public Health Statistics I</td>
<td>4</td>
</tr>
<tr>
<td>PH.600.712</td>
<td>Public Health Statistics II</td>
<td>4</td>
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</tbody>
</table>

1 This Bloomberg (BSPH) course is offered in-person and is sometimes available online

Please refer to the course schedule (ep.jhu.edu/schedule (https://apps.ep.jhu.edu/schedule/search/)) published each term for exact dates, times, locations, fees, and instructors.