

**“At A Glance” ISEM Master’s Program and Related Courses (version 08/25/23)**  
**(See HU Graduate Catalog for Course Details)**

<ul style="list-style-type: none"> <li>(Year 1, Semester 1) ISEM 501: Introduction to Digital Technologies (Preparatory Elective course)</li> </ul>
<b>“Mandatory Core” courses (5 Courses = 15 semester hours)</b>
<ul style="list-style-type: none"> <li>(Year 1, Semester 1) ISEM 500: Strategic Planning for Digital Transformation</li> <li>(Year 1, Semester 1) MGMT 510: Business Strategy &amp; Management Principles</li> <li>(Year 1, Semester 2) ISEM 540: Architecture &amp; Integration of Modern Enterprises</li> <li>(Year 1, Semester 2) ISEM 530: Systems Engineering Principles</li> </ul>
Then “Pick 1” from the following list of five (5) courses (3 Semester hours):
<ul style="list-style-type: none"> <li>(Year 1, Semester 3) ISEM 502 / ISEM 534 / ISEM 551 / ISEM 570 / MGMT 511 (also listed below)</li> </ul>

<b>ISEM Elective and Concentration Courses (5 Courses = 15 semester hours)</b>	
<b>These courses start Year 1, Semester 3, following completion of all “Mandatory Core” courses</b>	
<b>Course Number and Title</b>	<b>Course Number and Title</b>
<p><b><u>Current and Emerging Technology Courses</u></b></p> <ul style="list-style-type: none"> <li>ISEM 502: User-Centered Design</li> <li>ISEM 533: Distributed Databases, Administration and Security Systems</li> <li>ISEM 534: Database Design and Management</li> <li>ISEM 536: IT Infrastructure &amp; Cloud Computing</li> <li>ISEM 550: Cyber Security Management</li> <li>ISEM 551: Web-based Software Engineering</li> <li>ISEM 558: IoTs and Industry 4.0</li> <li>ISEM 570: Principles of ITIL</li> <li>ISEM 572: Smart Cities and Strategic Intelligence</li> <li>ISEM 582: Cloud Computing Applications for Business</li> </ul>	<p><b><u>Management Sciences</u></b></p> <ul style="list-style-type: none"> <li>ISEM 503: Artificial Intelligence Principles and Applications</li> <li>ISEM 505 AI Systems Engineering</li> <li>ISEM 564: Big Data Emerging Applications</li> <li>ISEM 565: Business Intelligence and Decision Support</li> <li>ISEM 585 Introduction to Modeling, Optimization and Decision Making</li> </ul>
<p><b><u>Blockchain and Cryptocurrency</u></b></p> <ul style="list-style-type: none"> <li>ISEM 574: Bitcoin Blockchain</li> <li>ISEM 575: Ethereum Blockchain</li> <li>ISEM 576: Cryptocurrency and Regulation</li> <li>ISEM 577: Blockchain Scalability</li> <li>ISEM 578: Decentralized Finance</li> </ul>	<p><b><u>Digital Health and HCIN Cross-Lists</u></b> (Regular Semesters only)</p> <ul style="list-style-type: none"> <li>ISEM 512: Essential Skills</li> <li>ISEM 541: Healthcare Systems</li> <li>ISEM 542: Health Informatics and Information Systems</li> <li>ISEM 543: Digital Health</li> <li>ISEM 545: Healthcare Data</li> </ul>
<p><b><u>Enterprise Management</u></b></p> <ul style="list-style-type: none"> <li>ISEM 528: Industry Analysis &amp; Technology Patterns</li> <li>ISEM 547: Technology Management</li> <li>MGMT 511: Digital and Global Enterprises</li> <li>MGMT 512: Marketing in the Digital Age</li> <li>MGMT 513: Financial and Managerial Accounting</li> </ul>	
<b>ISEM Capstone Sequence (2 Courses = 6 semester hours).</b> Typically taken in semesters 5, 6.	
<ul style="list-style-type: none"> <li>GRAD 695: Research Methods and Writing</li> <li>ISEM / GRAD 699: Applied Project or Research Thesis</li> </ul>	
<b>ISEM PhD Preparatory Course</b> (available to Master’s students)	
<ul style="list-style-type: none"> <li>GRAD 509: Research Methods</li> </ul>	

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