

# RAIKES SCHOOL OF COMPUTER SCIENCE AND MANAGEMENT (RAIK)

---

## RAIK 181H Honors: Foundations of Business I

**Crosslisted with:** BSAD 181H

**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management.

**Notes:** First course in the Raikes School core.

**Description:** Introduction to financial and managerial accounting, and accounting information systems. Content integration and application, problem-solving and situational analysis.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Prerequisite for:** ABUS 341, MRKT 341; ACCT 202; ACCT 308; ACCT 309; ACCT 313; BLAW 371; BLAW 371H; BLAW 372; ECON 311; MNGT 301; MNGT 301H; MNGT 475H, RAIK 476H; MRKT 341H, RAIK 341H; RAIK 182H, BSAD 182H; SCMA 331; SCMA 335; SCMA 350; SCMA 350H

## RAIK 182H Honors: Foundations of Business II

**Crosslisted with:** BSAD 182H

**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management and BSAD/RAIK 181H.

**Notes:** Second course in the Raikes School core.

**Description:** Introduction to microeconomics and macroeconomics. Content integration and application, problem-solving and situational analysis.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Offered:** SPRING

**Prerequisite for:** ABUS 341, MRKT 341; BLAW 371; BLAW 371H; BLAW 372; ECON 303; ECON 311; ECON 321; ECON 322; ECON 323; ECON 340; ECON 371; ECON 381; ECON 388; ECON 389; FINA 307, FINA 307H; MNGT 301; MNGT 301H; MNGT 475H, RAIK 476H; MRKT 341H, RAIK 341H; RAIK 281H, BSAD 281H; SCMA 331; SCMA 335; SCMA 350; SCMA 350H

**ACE:** ACE 6 Social Science

## RAIK 183H Honors: Computer Problem Solving Essentials

**Crosslisted with:** CSCE 183H

**Prerequisites:** Good standing in the University Honors Program; admission to the Jeffrey S. Raikes School of Computer Science and Management.

**Description:** Introduction to problem solving with computers. Problem analysis and specification, algorithm development, program design, and implementation. JAVA in a Windows platform.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Prerequisite for:** CSCE 230; CSCE 230H; CSCE 235, CSCE 235H; ECON 215; MRKT 350; RAIK 184H, CSCE 184H

**ACE:** ACE 3 Math/Stat/Reasoning

## RAIK 184H Honors: Software Development Essentials

**Crosslisted with:** CSCE 184H

**Prerequisites:** Good standing in the University Honors Program; admission to the Jeffrey S. Raikes School of Computer Science and Management; and CSCE/RAIK 183H.

**Description:** Problem solving with computers. Problem analysis and specification, data structures, relational databases, algorithm development, and program design and implementation. Discrete mathematics topics, propositional and predicate logic, sets, relations, functions, and proof techniques. Software Development Principles.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Prerequisite for:** BSAD 372H, RAIK 372H; CSCE 231; CSCE 283H; CSCE 322; CSCE 322H; CSCE 378; CSCE 378H; SOFT 260H, RAIK 283H

## RAIK 185H Honors: Foundations of Leadership I

**Crosslisted with:** BSAD 185H

**Prerequisites:** Good standing in the University Honors Program; Admission to the Raikes School of Computer Science and Management.

**Description:** Introduction to personal development and its application to leadership.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**Prerequisite for:** RAIK 186H, BSAD 186H

## RAIK 186H Honors: Foundations of Leadership II

**Crosslisted with:** BSAD 186H

**Prerequisites:** Admission to the Raikes School of Computer Science and Management and BSAD/RAIK 185H.

**Notes:** Second course in the Raikes School leadership core. BSAD/RAIK is 'Letter grade only'.

**Description:** Continued pursuit and analysis of personal development and its application to leadership. Introduction to teams.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**Prerequisite for:** RAIK 285H, BSAD 285H

## RAIK 187H Honors: Introductory Communication Seminar I

**Crosslisted with:** JGEN 187H

**Prerequisites:** Good standing in the University Honors Program and admission to the Raikes School of Computer Science and Management.

**Description:** Introduction to oral and written communication within the context of the Raikes School. Basics of writing, editing and presentation.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**ACE:** ACE 2 Communication Competence

**RAIK 188H Honors: Introductory Communication Seminar II**

**Crosslisted with:** JGEN 188H

**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management; JGEN/RAIK 187H.

**Notes:** Continuation of JGEN/RAIK 187H.

**Description:** Basics of writing, editing, and presentation.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**Prerequisite for:** RAIK 287H, JGEN 287H

**ACE:** ACE 2 Communication Competence

**RAIK 270H Statistics and Applications**

**Crosslisted with:** STAT 380, STAT 380H

**Prerequisites:** A grade of P, C, or higher in MATH 107 or MATH 107H.

**Notes:** Credit toward the degree can not be earned in STAT 218 if taken after or taken in parallel with STAT/MATH 380.

**Description:** Probability calculus; random variables, their probability distributions and expected values; t, F and chi-square sampling distributions; estimation; testing of hypothesis; and regression analysis with applications.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Prerequisite for:** ABUS 341, MRKT 341; BLAW 371; BLAW 371H; BLAW 372; BSAD 371H, RAIK 371H; ECEN 325; ECEN 850, ECEN 450; ECON 311; FINA 361; FINA 361H; MATH 435; MATH 809, MATH 409; MECH 343; MNGT 301; MNGT 301H; MRKT 345; MRKT 350; MRKT 446; RAIK 370H, CSCE 370H; SCMA 250; SCMA 331; SCMA 350; SCMA 350H; STAT 318; STAT 412; STAT 414; STAT 450

**ACE:** ACE 3 Math/Stat/Reasoning

**Groups:** Advanced Mathematics Courses

**RAIK 281H Honors: Business Systems and Operations I**

**Crosslisted with:** BSAD 281H

**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management and BSAD/RAIK 182H.

**Description:** Focus on operations management. Introduction to advanced management principles and accounting system development. Content integration and application, problem-solving and situational analysis.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Prerequisite for:** RAIK 282H, BSAD 282H

**RAIK 282H Honors: Business Systems and Operations II**

**Crosslisted with:** BSAD 282H

**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management and BSAD/RAIK 281H.

**Description:** Continuation of operations management topics including advanced management principles and accounting system development. Content integration and application, problem-solving and situational analysis.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**Prerequisite for:** ABUS 341, MRKT 341; ACCT 308; ACCT 309; ACCT 313; BLAW 371; BLAW 371H; BLAW 372; MNGT 301; MNGT 301H; RAIK 381H, BSAD 381H; RAIK 401H, BSAD 401H, CSCE 401H, SOFT 401H; SCMA 331; SCMA 335; SCMA 350; SCMA 350H

**RAIK 283H Honors: Software Engineering III**

**Crosslisted with:** SOFT 260H

**Prerequisites:** A grade of C+ or higher in either SOFT 161 or SOFT 161H or SOFT 162 or RAIK 184H or equivalent; CSCE 235.

**Description:** Advanced data structures and their associated algorithms for solving computational problems. Techniques for systematically specifying, managing, and analyzing software requirements, and for managing software change and working effectively in teams.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Offered:** FALL

**Prerequisite for:** CSCE 351; CSCE 361, CSCE 361H; CSCE 411H, RAIK 411H; SOFT 261; SOFT 261H, RAIK 383H

**RAIK 284H Honors: Foundations of Computer Systems**

**Crosslisted with:** CSCE 284H

**Prerequisites:** Good standing in the University Honors Program; admission to the Jeffrey S. Raikes School of Computer Science and Management; and CSCE/RAIK 283H.

**Description:** Introduction to fundamental organization and structure of computer systems. Boolean logic, data representation, processor organization, input/output, memory organization, system support software and communication.

**Credit Hours:** 4

**Max credits per semester:** 4

**Max credits per degree:** 4

**Format:** LEC

**Prerequisite for:** CSCE 383H; RAIK 384H, CSCE 384H; RAIK 401H, BSAD 401H, CSCE 401H, SOFT 401H

**RAIK 285H Honors: Applications of Leadership I**

**Crosslisted with:** BSAD 285H

**Prerequisites:** Admission to the Raikes School of Computer Science and Management and BSAD/RAIK 186H.

**Description:** Making sense of yourself and others. Applications to team communication and shared leadership development.

**Credit Hours:** 1

**Max credits per semester:** 1

**Max credits per degree:** 1

**Format:** LEC

**Prerequisite for:** RAIK 286H, BSAD 286H

**RAIK 286H Honors: Applications of Leadership II****Crosslisted with:** BSAD 286H**Prerequisites:** Admission to the Raikes School of Computer Science and Management and BSAD 285H/RAIK 285H.**Description:** Continued making sense of yourself and others. Further applications to team and shared leadership communication and development.**Credit Hours:** 0**Max credits per semester:****Max credits per degree:****Format:** LEC**RAIK 287H Honors: Applied Communication Seminar I****Crosslisted with:** JGEN 287H**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management; JGEN/RAIK 188H.**Description:** Application of oral and written communication within the context of the Raikes School of Computer Science and Management. Professional writing and oral presentations.**Credit Hours:** 1**Max credits per semester:** 1**Max credits per degree:** 1**Format:** LEC**Prerequisite for:** JGEN 288H**ACE:** ACE 1 Writing**RAIK 288H Honors Business Writing****Crosslisted with:** BSAD 220H**Prerequisites:** Open to CBA Honors Academy Students or Raikes School of Computer Science and Management students in good standing or by permission. Sophomore standing; ENGL 150/ENGL 150H or ENGL 151/ENGL 151H.**Description:** Principles of effective written business communication. Focus on effective writing strategies used in business disciplines.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** ABUS 341, MRKT 341; BLAW 371; BLAW 371H; BLAW 372; BLAW 372H; FINA 361; FINA 361H; MNGT 301; MNGT 301H; MRKT 341H, RAIK 341H; SCMA 331; SCMA 350**ACE:** ACE 1 Writing**RAIK 341H Honors: Marketing****Crosslisted with:** MRKT 341H**Prerequisites:** CBA Hon or Raikes in good standing or permission. SO; 2.5 GPA; Bus Qual (MATH104 or 106/106B or 107 or 208; BSAD220; ACCT201 and 202; ECON211 and 212; ECON215 or equivalent.) Prereqs differ for RAIKES, ACTS, and ABUS majors - see bulletin for exceptions.**Notes:** Credit toward the degree cannot be earned in both MRKT300 and MRKT341/MRKT341H.**Description:** The marketing system, its relations with the socioeconomic system, and the influences of each upon the other. Evolution and present structure of marketing institutions and processes. Customer attributes and behavioral characteristics, and how a marketing manager responds to these in the design of marketing strategies, using research, product development, pricing, distribution structure, and promotion.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** MNGT 475, MNGT 875; MNGT 475H, RAIK 476H; MRKT 345; MRKT 346, SCMA 346; MRKT 347; MRKT 350; MRKT 355; MRKT 399; MRKT 425; MRKT 428; MRKT 442; MRKT 443; MRKT 444, SCMA 444; MRKT 446; MRKT 449; MRKT 453; MRKT 458; MRKT 490; SCMA 432**RAIK 370H Data and Models II: Data Science Fundamentals****Crosslisted with:** CSCE 370H**Prerequisites:** Good standing in the University Honors Program or by invitation; admission to the Jeffrey S. Raikes School of Computer Science and Management; and RAIK 270H**Description:** Introduction to approaches using data for prediction and learning. Exploration of data for linear and nonlinear data modeling, machine learning, and supportive methods from statistics and numerical methods.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Offered:** FALL/SPR**Prerequisite for:** BSAD 371H, RAIK 371H**RAIK 371H Fundamentals of Management Science****Crosslisted with:** BSAD 371H**Prerequisites:** Junior standing in the Raikes School of Computer Science and Management and RAIK 270H and RAIK 370H**Notes:** Third course in Raikes School Data and Models course sequence.**Description:** Focus on time series and random processes, simulation, network models, and constrained optimization for business modeling and decision making.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Offered:** SPRING

**RAIK 372H Honors: Business Law****Crosslisted with:** BSAD 372H**Prerequisites:** Admission to the Raikes School of Computer Science and Management and RAIK 184.**Description:** Legal, ethical, and social issues related to the development and use of computer technology. Basic legal principles needed to recognize the relevant issues and the legal implications of business situations. Ethical theory, and social, political, and legal considerations. Scenarios in problem areas: privacy, reliability and risks of complex systems, intellectual property, and responsibility of professionals for applications and consequences of their work.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Offered:** SPRING**ACE:** ACE 8 Civic/Ethics/Stewardship**RAIK 381H Honors: Advanced Topics in Business I****Crosslisted with:** BSAD 381H**Prerequisites:** Good standing in the University Honors Program and admission to the Raikes School of Computer Science and Management; BSAD/RAIK 282H.**Description:** Macroeconomics and introduction to advanced topics in accounting systems, finance, management and information systems. Content integration and application to problem-solving and situational analysis.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** ECON 365, FINA 365; FINA 338; FINA 363; FINA 367; FINA 375; FINA 401; FINA 450; MNGT 475H, RAIK 476H; RAIK 382H, BSAD 382H**RAIK 382H Honors: Advanced Topics in Business II****Crosslisted with:** BSAD 382H**Prerequisites:** Good standing in the University Honors Program; admission to the Raikes School of Computer Science and Management and BSAD/RAIK 381H.**Description:** Microeconomics. Continuation of advanced topics in accounting systems, finance, management and information systems. Content integration and application, problem-solving and situational analysis.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**RAIK 383H Software Engineering IV****Crosslisted with:** SOFT 261H**Prerequisites:** Good Standing in UNL Honors Program or by invitation; a grade of C+ or higher in SOFT 260, SOFT 260H, or RAIK 283H.**Description:** Techniques and tools based on disciplined software engineering principles for producing, interpreting, and communicating visual artifacts related to software architecture and construction.**Credit Hours:** 4**Max credits per semester:** 4**Max credits per degree:** 4**Format:** LEC**Offered:** FALL/SPR**Prerequisite for:** CSCE 461, CSCE 861, SOFT 461; CSCE 486**ACE:** ACE 2 Communication Competence**RAIK 384H Honors: Applied Numerical Analysis****Crosslisted with:** CSCE 384H**Prerequisites:** Good standing in the University Honors Program; admission to the Jeffrey S. Raikes School of Computer Science and Management; and CSCE/RAIK 284H; parallel BSAD/RAIK 382H.**Description:** Application of established numerical analysis techniques to selected business and finance problems, finite difference applied to standard options or stochastic processes in modeling financial markets.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**RAIK 401H Honors: RAIK Design Studio I****Crosslisted with:** BSAD 401H, CSCE 401H, SOFT 401H**Prerequisites:** Good standing in the University Honors Program or by invitation; admission to the Jeffrey S. Raikes School of Computer Science and Management; BSAD/RAIK 282H; and CSCE/RAIK 284H.**Notes:** First semester in the Jeffrey S. Raikes School of Computer Science and Management design studio**Description:** Application of Raikes School core content in a team oriented, project management setting. Complete projects in consultation with private and public sector clients.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** RAIK 402H, BSAD 402H, CSCE 402H, SOFT 402H**ACE:** ACE 8 Civic/Ethics/Stewardship**RAIK 402H Honors: RAIK Design Studio II****Crosslisted with:** BSAD 402H, CSCE 402H, SOFT 402H**Prerequisites:** Good standing in the University Honors Program or by invitation; admission to the Jeffrey S.**Notes:** Second semester in the Jeffrey S. Raikes School of Computer Science and Management design studio**Description:** Application of Raikes School core content in a team oriented, project management setting. Complete projects in consultation with private and public sector clients.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** RAIK 403H, BSAD 403H, CSCE 403H, SOFT 403H**ACE:** ACE 10 Integrated Product**RAIK 403H Honors: RAIK Design Studio III****Crosslisted with:** BSAD 403H, CSCE 403H, SOFT 403H**Prerequisites:** Good standing in the University Honors Program or by invitation; admission to the Jeffrey S. Raikes School of Computer Science and Management; BSAD/CSCE/SOFT/RAIK 402H.**Notes:** Third semester of Jeffrey S. Raikes School of Computer Science and Management design studio sequence.**Description:** Application of Jeffrey S. Raikes School of Computer Science and Management core content in a team oriented, project management setting. Complete projects in consultation with private and public sector clients.**Credit Hours:** 3**Max credits per semester:** 3**Max credits per degree:** 3**Format:** LEC**Prerequisite for:** RAIK 404H, BSAD 404H, CSCE 404H, SOFT 404H

**RAIK 404H Honors: RAIK Design Studio IV**

**Crosslisted with:** BSAD 404H, CSCE 404H, SOFT 404H

**Prerequisites:** Good standing in the University Honors Program or by invitation; admission to the Jeffrey S. Raikes School of Computer Science and Management; and BSAD/CSCE/SOFT/RAIK 403H.

**Notes:** Fourth semester in the Jeffrey S. Raikes School of Computer Science and Management design studio sequence.

**Description:** Application of Raikes School core content in a team oriented, project management setting. Complete projects in consultation with private and public sector clients.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**RAIK 411H Honors: Data Modeling for Systems Development**

**Crosslisted with:** CSCE 411H

**Prerequisites:** Good standing in the University Honors Program; A grade of "P" or "C" or better in CSCE 310, CSCE 310H, CSCE 311, SOFT 260, SOFT 260H or RAIK 283H.

**Description:** Concepts of relational and object-oriented data modeling through the process of data model development including conceptual, logical and physical modeling. Techniques for identifying and creating relationships between discrete data members, reasoning about how data modeling and analysis are incorporated in system design and development, and specification paradigms for data models. Common tools and technologies for engineering systems and frameworks for integrating data. Design and analysis of algorithms and techniques for identification and exploration of data relationships, such as Bayesian probability and statistics, clustering, map-reduce, and web-based visualization.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**RAIK 476H Honors: Business Policies and Strategies**

**Crosslisted with:** MNGT 475H

**Prerequisites:** Open CoB Hon, Raikes and Hon students in good & SR standing. 2.5 GPA; major in Col of Bus; BSAD220; ACCT201&202; ECON211&212; FINA361; SCMA350&331; MNGT301; MRKT341; or equiv. Prereqs differ for RAIKES, ACTS, & ABUS majors - see bulletin for exceptions

**Notes:** Cannot be taken Pass/No Pass.

**Description:** Formulation and application of business policies and strategies; analysis of cases using knowledge acquired in basic courses in accounting, economics, finance, human resources, information systems, marketing, and operations. The "C" complexity of business problems and the interrelationship of business functions.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Format:** LEC

**ACE:** ACE 10 Integrated Product