Undergraduate Curriculum Committee (UCC)
Meeting Minutes
Thursday April 13, 2017
2:00 pm
Brewster B-104

Regular Members Present:
Jean-Luc Scemama
Karen Vail-Smith
Nancy Spalding
Mark Richardson
Michael Dingfelder
Mark Johnson
David Batts

Regular Members Excused:
Gail Ratcliff

Ex-Officio Members Present:
Josie Bowman
Patrick Rider
David Wilson-Okamura
Lori Flint
Rachelle Benavidez -Student Representative

Ex-Officio Members Excused:

IPAR, IPA Institutional Planning and Accreditation
Karen Traynor
Karen Summey

Office of the Registrar:
Diane Coltraine

I. Call to Order


II. Thomas Harriot College of Arts and Sciences
Department of Psychology
(Jon Reed)

1. Revision of an Existing Course: (prereq.) PSYC 2101

   Memorandum of Request
   Marked Catalog Copy
Discussion/Revisions:
General discussion regarding packet.

Action:
Approved

III. College of Fine Arts and Communication
School of Art and Design
(Robert Quinn)

Renumbering of an Existing Course: (different level) ARTH 2920 to 3915

Discussion/Revisions:

Memorandum of Request
ARTH 3915 Course Proposal Form: Under #10 need to check one area in each column regarding how the course will be taught. Nice use of the Bloom taxonomy in the objectives. Need to edit the grading scale according to ECU Policy.
Marked Catalog Copy: Make sure change made in the title is reflected in the catalog pages.

Overview of proposed change. Make sure to include in the memo the change in course title. Explain how the changes will benefit the students.

Action: Approved as amended.

IV. Thomas Harriot College of Arts and Sciences
Department of Anthropology
(Eric Bailey)

Proposal of a New Course: ANTH 2250

Discussion/Revisions:

Memorandum of Request: Based on an assessment the department felt that there was a need for courses related to cultural and race relations. Currently being used for the Honors program and felt it would be good to offer the course to all students. Correct the memo and course justification (Box 9 on course proposal form) to more accurately link the department assessment needs to the specific course. Please also rephrase final sentence so your point is clearer.

ANTH 2250 Course Proposal: On the course proposal form (Box 18b), please correct the 2nd course objective so that the objective is measurable. Change objective “use” to “apply”. Need to edit the number of times the class meets make sure 3 hours per week. Slight edit needed to grading scale.

Marked Catalog Copy: Make sure course description on course proposal matches the statement in the catalog.
**Action:** Approved as amended.

**V. College of Engineering and Technology**
Department of Technology Systems
(David Batts, Phil Lunsford, Leslie Pagliari)

1. **Proposal of New Courses:** ICTN 3210, 3220, 3410, 4420, 4760
2. **Revision of Existing Courses:** ICTN 4020, 4022
3. **Revision of Existing Concentrations:** (titles). Remove information from memo related to second degree. Need to justify the reduction in credit hours.

Architectural Technology to Architectural Design Technology: The addition of design more accurately depicts the concentration and course work.

Manufacturing Systems to Industrial Engineering Technology: Accurately depict the concentration and mirrors the 4 year degree.

Industrial Supervision to Industrial Management: Based on a review of 86 higher education programs the title reflects the degree designation used in other academic settings.

4. **Deletion of Existing Courses:** (active): ITEC 2010; (banked): 3030, 3091, 3191, 3294, 4290

5. **Revision of an Existing Degree:** Industrial Technology, BS

**Discussion/Revisions:**

Memorandum of Request:

Special topic courses have been taught for several years, and they are requesting specific numbers for those courses (ICTN 4020, 4022). This raises the credit hours back to what they were before the foundation changes. Memo of request under #1 need to list the courses by numbers and clearly indicate that discussion among the faculty lead to the changes. Need to include all the changes in the curriculum.

ICTN 3210 Course Proposal Form: include in justification that this is a new area in the field. Discussed course descriptions with no suggested changes.

ICTN 3220 Course Proposal Form: Same comments related to justification

ICTN 3410 Course Proposal Form: Need to add period after 2150 for catalog consistency. Same comment regarding justification.

ICTN 4020 Course Proposal Form: Need to make sure that the course description and catalog copies are the same. Use what is in the catalog copy. Need to include that practicum hours are added and that is why an increase in hours is requested. Move statement regarding meeting times from course justification (#8) Objective---apply

ICTN 4022 Course Proposal Form: Make sure that course description is the same as in the catalog. Under 9 move to #8. Hour allocation need to select number of hours (1) per week and the capstone hours will be off campus.
ICTN 4420 Course Proposal Form: need a period after the pre-requisite. Suggested edits to course description using punctuation. Replace one “and” with a comma; semicolon as presenter feel appropriate.
ICTN 4760 Course Proposal Form: period after pre-requisite.

Marked Catalog Copy: Comments made regarding consistency of the catalog copy and course description.

Action: Approved as amended.

VI. Thomas Harriot College of Arts and Sciences
Department of History
(Rick Hernandez)

1. Revision of Existing Courses: (catalog text) HIST 4940, 4941, 4942, 4943, 4944, 4945, 4946, 4947, 4948
2. Revision of an Existing Minor: Public History
3. Revision of an Existing Degree: History, BA

Discussion/Revisions: Overview of memo and rationale for change presented.

Action: Approved

VII. New Business:
- Discussed room for meeting next year. Committee declined the use of the Greenville Center.
- A committee including the registrar’s office and Dr. Flint will be addressing the substitution of course. Will be reviewed in a similar format as the foundation courses.
- The committee will not require specific decimal point precision to the grading scale. The only requirement of the university policy is that a plus and minus scale be used. Nevertheless, what is presented in the course proposal needs to be clear to the student. There should be numbers associated with the scale.

VIII. Old Business: None

Adjournment: 4:20pm
Submitted by J. Bowman

Next meeting April 27 at 2pm
<table>
<thead>
<tr>
<th>Curricular Actions Reviewed 4/13/2017</th>
<th>At this meeting:</th>
<th>To date, to include this meeting:</th>
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<tr>
<td>Banked courses</td>
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<td>New bachelor’s degrees (Phase II - development)</td>
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<td>New bachelor’s degrees (Phase III – curriculum approval); consolidations</td>
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<td>New minors</td>
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<td>Prefix Revision of an Entire Course List</td>
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<td>Renumbered courses (same or different level)</td>
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<td>Revised courses (e.g., title, description, content, prereq., prefix)</td>
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<td>Revised degrees (e.g., admissions, core/concentration req., dept. text)</td>
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<tr>
<td>Unbanked courses</td>
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</table>
PSYC 2101 - Psychological Statistics

4 F,S,SS FC:SO

3 lecture and 2 lab hours per week.

P: MATH 1065 or equivalent or MATH 1066 MATH 1050 or MATH 1065 or MATH 1066; PSYC 1000 or PSYC 1060. Descriptive statistics. Measures of central tendency, variability, and correlation. Probability, with emphasis on sampling distributions used for prediction and hypothesis testing. Selection, computation, and interpretation of parametric and nonparametric inferential statistics, including introduction to analysis of variance.
ARTH 2920 3915 - Art of the Middle Ages

3 WIS Formerly ARTH 2920

Early Medieval, Romanesque, and Gothic art.

Art and architecture of Early Christian and Byzantine, Early Medieval, Romanesque, and Gothic periods. Focus is on accomplishments in cultural centers of Italy, Greece, Turkey, Syria, Israel, France, England, the German States, and Spain.
ANTH 2250 - Race and Ethnic Relations: Discovering New Solutions
3 S
Examination, discussion and development of race and ethnic relations issues with the goal of developing new solutions.

Anthropology

- ANTH 1000 - Introduction to Anthropology
- ANTH 1001 - Aliens, Atlantis and Archaeology: Pseudoscience and Interpretations of the Past
- ANTH 1050 - Global Understanding
- ANTH 1200 - Current Topics in Anthropology
- ANTH 2000 - Archaeology Around the World
- ANTH 2002 - Introduction to Asia
- ANTH 2005 - Environmental Anthropology
- ANTH 2010 - Societies Around the World
- ANTH 2015 - Introduction to Biological Anthropology
- ANTH 2016 - Biological Anthropology Laboratory
- ANTH 2025 - Sexual Behavior from an Anthropological Perspective
- ANTH 2200 - Introduction to Cultural Anthropology
- ANTH 2250 - Race and Ethnic Relations: Discovering New Solutions
- ANTH 2760 - Afro-Caribbean Language And Culture
- ANTH 3002 - Cultures of East Asia
- ANTH 3003 - Cultures of Africa
- ANTH 3004 - Cultures of the South Pacific
- ANTH 3005 - North American Indians
Department of Technology Systems

Tijjani Mohammed, Chair, Suite 202 Science and Technology Building

The Department of Technology Systems offers undergraduate programs leading to baccalaureate degrees in design, industrial distribution and logistics, industrial engineering technology, industrial technology, and information and computer technology. Our programs are applied (hands-on) in nature, and our close relationship with industry, along with the use of industrial advisory boards for each degree program, insures curriculum relevance and technical currency of content. Industry experiences such as internships and coops provide experiential learning opportunities for our students and help them to hit the ground running upon employment.

All of our undergraduate degree programs are accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

Admission

Upon admission to the university, students may declare a major in one of our following degree programs: design, industrial distribution and logistics, industrial engineering technology, or information and computer technology. The design, industrial distribution and logistics, and information and computer technology degree programs are accredited by the Association of Technology, Management, and Applied Engineering. The minimum degree requirement is 126 s.h. of credit. A minimum of 120 semester hours are required for the design, industrial distribution and logistics, industrial engineering technology, and industrial technology degree programs; while the information and computer technology degree program requires a minimum of 126 s.h.

Current ECU students who wish to transfer from other campus programs into any of the degree programs offered by the Department of Technology Systems must have a minimum GPA of 2.0. To take full advantage of the opportunities provided, interested students should make transfer decisions as early as possible.

The bachelor of science in industrial technology, which is also accredited by the Association of Technology, Management, and Applied Engineering, is designed specifically to meet a broad range of needs of transfer students from community colleges. Students accepted to ECU may declare an intent to enroll in the bachelor of science in industrial technology program, but must apply for admission to a specific concentration. Students not yet accepted into this program will not be allowed to enroll in concentration courses. Acceptance into the program may require additional qualifications such as industry certifications and additional courses depending on the chosen concentration, the earned associate degree, and the student’s background. All students pursuing a bachelor of science in industrial technology through distance education (online) are
required to complete ITEC 3000 in their initial semester of enrollment at East Carolina University.

Admission to the online BS in industrial technology program requires ITEC 3000 with a minimum grade of C (2.0). Those ECU students intending to transfer to a technology systems degree program from other campus programs must have at least a 2.0 GPA.

http://catalog.ecu.edu/preview_entity.php?catoid=10&ent_oid=917&returnto=710

Courses

Information and Computer Technology

**ICTN 3210 - Enterprise Server Technology**

3

Enterprise server hardware administration overview from a general user’s perspective. Major capabilities of mainframe operating system constructs and major subsystems.

**ICTN 3220 - Enterprise Server Programming**

3

P: ICTN 3210. Enterprise server structured programming, including assignment statements, conditional operations, I/O operations, and array processing techniques.

**ICTN 3410 - IPv6 Fundamentals**

3

P: ICTN 2150. Internet Protocol version 6 transition strategies, migration techniques, and basic configurations for routing protocols and operating systems.
ICTN 4020 - Senior Information and Computer Technology Capstone Design
Project I

1-2 WI F

1 lecture hour and 4 practicum hours per week. Students expected to provide personal transportation to field site. P: Senior standing; IDIS 3790; ITEC 3290, ITEC 3300; ICTN major. Open-ended design project—exposing students to the practice of information and computer technology. □ Includes development of a proposal for the ICTN 4022 project.

ICTN 4022 - Senior Information and Computer Technology Capstone Design
Project II

23 WI S

2 1 lecture hours and 8 practicum hours per week. Students expected to provide personal transportation to field site. P: ICTN 4020. Open-ended design project—exposing students to the practice of information and computer technology. □ Includes completion of the project proposed in ICTN 4020.

ICTN 4420 - IPv6 Security

3


ICTN 4760 - Cloud Infrastructure Services

3

P: ICTN 2150. Cloud computing technologies within an enterprise data center.
Courses

Information and Computer Technology

- ICTN 1500 - Information and Computer Technology Fundamentals
- ICTN 1501 - Information and Computer Technology Fundamentals Laboratory
- ICTN 2150 - Network Fundamentals
- ICTN 2151 - Network Fundamentals Laboratory
- ICTN 2154 - Digital Communication Systems
- ICTN 2155 - Digital Communication Systems Laboratory
- ICTN 2158 - Computer Networking Technology
- ICTN 2159 - Computer Networking Technology Laboratory
- ICTN 2510 - Network Environment I
- ICTN 2511 - Network Environment I Laboratory
- ICTN 2530 - Network Environment II
- ICTN 2531 - Network Environment II Laboratory
- ICTN 2732 - Scripting for Information Technology
- ICTN 2900 - Fundamental Network Security
- ICTN 2901 - Fundamental Network Security Laboratory
- ICTN 3210 - Enterprise Server Technology
- ICTN 3220 - Enterprise Server Programming
- ICTN 3250 - Internetwork Routing Technology
- ICTN 3251 - Internetwork Routing Technology Laboratory
- ICTN 3410 - IPv6 Fundamentals
- ICTN 3540 - Network Environment III
- ICTN 3541 - Network Environment III Laboratory
- ICTN 3900 - Web Services Management
- ICTN 3901 - Web Services Management Laboratory
- ICTN 4000 - Network Internship
- ICTN 4020 - Senior Information and Computer Technology Capstone Design Project I
- ICTN 4022 - Senior Information and Computer Technology Capstone Design Project II
- ICTN 4040 - Enterprise Information Security
- ICTN 4064 - Regulations and Policies
- ICTN 4150 - Switching Network Technology
- ICTN 4151 - Switching Network Technology Laboratory
- ICTN 4200 - Intrusion Detection Technologies
- ICTN 4201 - Intrusion Detection Technologies Laboratory
- ICTN 4250 - Enterprise Network Security Technology
- ICTN 4251 - Enterprise Network Security Technology Laboratory
- ICTN 4310 - Digital Forensics
- ICTN 4402 - Special Topics
- ICTN 4404 - Special Topics
- ICTN 4406 - Special Topics
- ICTN 4408 - Special Topics
- ICTN 4420 - IPv6 Security
- ICTN 4501 - Laboratory Problems
- ICTN 4503 - Laboratory Problems
• ICTN 4505 - Laboratory Problems
• ICTN 4520 - Wireless Communication
• ICTN 4521 - Wireless Communication Laboratory
• ICTN 4590 - Network Maintenance and Troubleshooting
• ICTN 4591 - Network Maintenance and Troubleshooting Laboratory
• ICTN 4600 - Enterprise Information Technology Management
• ICTN 4601 - Enterprise Information Technology Management Laboratory
• ICTN 4700 - Virtualization Technologies
• ICTN 4701 - Virtualization Technologies Laboratory
• ICTN 4750 - Enterprise Data Storage Technologies
• ICTN 4760 - Cloud Infrastructure Services
• ICT 4800 - Information Assurance Technologies
• ICTN 4801 - Information Assurance Technologies Laboratory

Industrial Technology

• ITEC 2000 - Industrial Technology Applications of Computer Systems
• ITEC 2010 - Introduction to Industry and Technology
• ITEC 2054 - Electricity/Electronics Fundamentals
• ITEC 2055 - Electricity/Electronics Fundamentals Laboratory
• ITEC 2080 - Thermal and Fluid Systems
• ITEC 2081 - Thermal and Fluid Systems Laboratory
• ITEC 2090 - Electromechanical Systems
• ITEC 2091 - Electromechanical Systems Laboratory
• ITEC 3000 - Internet Technology
• ITEC 3100 - Internship in Industrial Technology
• ITEC 3200 - Introduction to Statistical Process Control
• ITEC 3290 - Technical Writing
• ITEC 3292 - Industrial Safety
• ITEC 3300 - Technology Project Management
• ITEC 3800 - Cost and Capital Project Analysis
• ITEC 4100 - Internship in Industrial Technology
• ITEC 4150 - Microbiology for Industrial Processing
• ITEC 4250 - Engineering for Food Safety and Sanitation
• ITEC 4293 - Industrial Supervision
• ITEC 4300 - Quality Assurance Concepts
• ITEC 4350 - Separation Techniques for Industrial Processing
• ITEC 4401 - Independent Study: Industrial Technology
• ITEC 4402 - Independent Study: Industrial Technology
• ITEC 4403 - Independent Study: Industrial Technology
• ITEC 4450 - Waste Treatment Techniques for Industrial Processing
• ITEC 4501 - Special Topics: Industrial Technology
• ITEC 4502 - Special Topics: Industrial Technology
• ITEC 4503 - Special Topics: Industrial Technology
• ITEC 4550 - Quality in Regulatory Environment
Industrial Technology Banked Courses

- ITEC 2001 - Industrial Technology Applications of Computer Systems
- ITEC 3030 - Supervised Work Experience
- ITEC 3091 - Supervised Work Experience Laboratory
- ITEC 3291 - Technical Writing
- ITEC 3294 - Principles of Industrial Training
- ITEC 4290 - Job Analysis: Procedures and Applications
Industrial Technology, BS

David L. Batts, Coordinator, 230 Slay Building

The bachelor of science in industrial technology is accredited by the Association of Technology, Management, and Applied Engineering, and is a degree completion curriculum designed for students who have been awarded a qualified associate in applied science degree in an industrial or technical related field. Students accepted to ECU may declare an intent to enroll in the bachelor of science in industrial technology program, but must apply for admission to a specific concentration. Students not yet accepted into this program will not be allowed to enroll in concentration courses. Acceptance into the program may require additional qualifications such as industry certifications and additional courses depending on the chosen concentration, the earned associate in applied science degree, and the student’s background. All students pursuing a bachelor of science in industrial technology through distance education (online) are required to complete ITEC 3000 in their initial semester of enrollment at East Carolina University. Students must complete a minimum of 42 s.h. of upper division core and concentration courses at ECU. Students can transfer up to half (60 s.h.) of the total hours of the degree program (120 s.h.) from the community college. Those ECU students intending to transfer to a technology systems degree program from other campus programs must have at least a 2.0 GPA.

The industrial technology program is accredited by the Association of Technology, Management, and Applied Engineering. Students must have an associate of applied science degree from an approved technical program to apply to this program and must complete a minimum of 42 s.h. credit of upper division core and concentration courses at ECU. Industrial technology courses completed at East Carolina University (ECU) and transfer courses must total at least 66 s.h. All students pursuing a bachelor of science in industrial technology through distance education (online) are required to complete ITEC 3000 in the initial semester of enrollment at ECU. For distance education (online) students only, ITEC 3000 will fulfill 3 s.h. of the required 27 s.h. in the chosen concentration area. ITEC 3100, ITEC 4100 or any course that does not meet as a class may not be used as upper division core or concentration courses.

Minimum degree requirement is 126 124 120 s.h. of credit as follows:

1. Foundations curriculum requirements including those listed below - 42 40 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum.)

- ECON 2113 - Principles of Microeconomics
• MATH 1065 - College Algebra or
  MATH 1066 - Applied Mathematics for Decision Making
• PSYC 1000 - Introductory Psychology
  PSYC 3241 - Personnel and Industrial Psychology

2. Lower division core - 24 s.h.

(Transfer technical courses up to 24 s.h. or approved technical courses.)

3. Upper division core - 15 s.h.

• ITEC 3200 - Introduction to Statistical Process Control
• ITEC 3290 - Technical Writing
• ITEC 3300 - Technology Project Management
• ITEC 3800 - Cost and Capital Project Analysis
• ITEC 4293 - Industrial Supervision

4. Concentrations - 27 s.h.

(Choose one.)

Architectural design technology concentration:

• DESN 3030 - Architectural Drafting
• DESN 3031 - Architectural Drafting Laboratory
• DESN 3032 - Engineering Graphics II
• DESN 3033 - Engineering Graphics II Laboratory
• DESN 3036 - Architectural Design and Drafting
• DESN 3037 - Architectural Design and Drafting Laboratory
• DESN 3038 - Sustainable Design
• DESN 3039 - Sustainable Design Laboratory
• PLAN 2410 - Fundamentals of GIS
• PLAN 3021 - Introduction to Planning Techniques
• PLAN 4003 - Urban Form and Design
• Approved technical electives (6 s.h.)

**Bioprocess manufacturing concentration:**

- ITEC 3292 - Industrial Safety
- ITEC 4150 - Microbiology for Industrial Processing
- ITEC 4250 - Engineering for Food Safety and Sanitation
- ITEC 4300 - Quality Assurance Concepts
- ITEC 4350 - Separation Techniques for Industrial Processing
- ITEC 4450 - Waste Treatment Techniques for Industrial Processing
- ITEC 4550 - Quality in Regulatory Environment
- Approved technical electives (6 s.h.)

**Distribution and logistics concentration:**

- Choose 3 s.h. of approved technical electives
- Choose 24 s.h. of advisor approved IDIS courses from below:

  - IDIS 2771 - Introduction to Distribution and Logistics
  - IDIS 2830 - ERP Systems for Distributors
  - IDIS 3700 - Transportation Logistics
  - IDIS 3790 - Technical Presentations
  - IDIS 3795 - Distributor Sales and Branch Management
  - IDIS 3796 - Distributor Sales and Branch Management Laboratory
  - IDIS 3815 - Supply Chain Logistics
  - IDIS 3835 - Security and Risk Analysis for Distributors
  - IDIS 3840 - Procurement Logistics and Inventory Control
  - IDIS 3850 - Warehousing and Materials Handling
  - IDIS 3851 - Warehousing and Materials Handling Laboratory
  - IDIS 4600 - Strategic Global Sourcing for Distributors
  - IDIS 4785 - Strategic Pricing for Distributors
  - IDIS 4790 - Global Logistics
  - IDIS 4800 - Distribution and Logistics Internship
  - IDIS 4802 - Distribution and Logistics Research

**Health information technologies concentration:**

- HIMA 3000 - Medical Terminology for Health Professionals
- HIMA 3120 - Health Care Delivery Systems
- HIMA 4030 - Quality Management in Health Care
- HSMA 2000 - Professional Roles and Environments in Health Care
• HSMA 3020 - Health Care Payment Systems
• HSMA 3025 - Professional Ethical Codes and Law in Health Care
• HSMA 3035 - Interpersonal Team Skills for Health Care Supervisors and Practitioners
• HSMA 4010 - Health Information Management
• Approved technical electives (3 s.h.)

**Industrial supervision management concentration:**

• IDIS 2771 - Introduction to Distribution and Logistics
• IDIS 3790 - Technical Presentations
• IDIS 3815 - Supply Chain Logistics
• IENG 3300 - Plant Layout and Materials Handling
• IENG 4023 - Advanced Manufacturing Systems
• ITEC 3292 - Industrial Safety
• ITEC 4300 - Quality Assurance Concepts
• Approved technical electives (6 s.h.)

**Information and computer technology concentration:**

(Choose 27 s.h. from the below courses.)

• ICTN 2530 - Network Environment II
• ICTN 2531 - Network Environment II Laboratory
• ICTN 2900 - Fundamental Network Security
• ICTN 2901 - Fundamental Network Security Laboratory
• ICTN 3210 - Enterprise Server Technology
• ICTN 3220 - Enterprise Server Programming
• ICTN 3250 - Internetwork Routing Technology
• ICTN 3251 - Internetwork Routing Technology Laboratory
• ICTN 3410 - IPv6 Fundamentals
• ICTN 3540 - Network Environment III
• ICTN 3541 - Network Environment III Laboratory
• ICTN 3900 - Web Services Management
• ICTN 3901 - Web Services Management Laboratory
• ICTN 4040 - Enterprise Information Security
• ICTN 4064 - Regulations and Policies
• ICTN 4150 - Switching Network Technology
• ICTN 4151 - Switching Network Technology Laboratory
• ICTN 4200 - Intrusion Detection Technologies
• ICTN 4201 - Intrusion Detection Technologies Laboratory
• ICTN 4250 - Enterprise Network Security Technology
• ICTN 4251 - Enterprise Network Security Technology Laboratory
• ICTN 4310 - Digital Forensics
- ICTN 4402 - Special Topics
- ICTN 4404 - Special Topics
- ICTN 4406 - Special Topics
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- ICTN 4590 - Network Maintenance and Troubleshooting
- ICTN 4591 - Network Maintenance and Troubleshooting Laboratory
- ICTN 4600 - Enterprise Information Technology Management
- ICTN 4601 - Enterprise Information Technology Management Laboratory
- ICTN 4700 - Virtualization Technologies
- ICTN 4701 - Virtualization Technologies Laboratory
- ICTN 4750 - Enterprise Data Storage Technologies
- ICTN 4760 - Cloud Infrastructure Services
- ICTN 4800 - Information Assurance Technologies
- ICTN 4801 - Information Assurance Technologies Laboratory

**Manufacturing Industrial engineering technology systems concentration:**

- IENG 3300 - Plant Layout and Materials Handling
- IENG 4020 - Manufacturing System Planning
- IENG 4023 - Advanced Manufacturing Systems
- IENG 4200 - Work Methods and Ergonomics Analysis
- ITEC 3292 - Industrial Safety
- ITEC 4300 - Quality Assurance Concepts
- Approved technical electives (9 s.h.)

**Mechanical design technology concentration:**

- DESN 3032 - Engineering Graphics II
- DESN 3033 - Engineering Graphics II Laboratory
- DESN 3230 - Rapid Prototyping
- DESN 3231 - Rapid Prototyping Laboratory
- DESN 3234 - Jig and Fixture Design
- DESN 3235 - Jig and Fixture Design Laboratory
- DESN 3236 - Geometric Dimensioning and Tolerancing
- DESN 3237 - Geometric Dimensioning and Tolerancing Laboratory
- IENG 2076 - Introduction to Computer Numerical Control (CNC)
- IENG 2077 - Introduction to Computer Numerical Control (CNC) Laboratory
- IENG 3020 - Robotics in Computer Integrated Manufacturing
- IENG 3021 - Robotics in Computer Integrated Manufacturing Laboratory
- IENG 3300 - Plant Layout and Materials Handling
- Approved technical electives (6 s.h.)

5. Cognates – 5 s.h.

- FINA 2244 - Legal Environment of Business
- MATH 1074 - Applied Trigonometry

65. Electives to complete requirements for graduation.
Information and Computer Technology, BS

Philip J. Lunsford, Coordinator, C123 Science and Technology Building

The bachelor of science in information and computer technology, accredited by the Association of Technology, Management, and Applied Engineering, prepares students for a career in information technology, computer networking, systems administration, cyber security, and technical management. Course work provides a sound base of information technology fundamentals and advanced work in internet working and client-server information systems. Much of the curricula is based on formal academy or curricular alliances with industry partners. Opportunities for industrial certifications with these companies are built into the curriculum.

The required courses also include foundational skills in supervision and management to prepare students to lead and work in teams, and to provide a platform for career advancement into leadership positions.

Students are required to have an internship and to complete a two-semester professional capstone project. Additional opportunities to obtain further industry experience through co-op positions, course-based projects in the program, and by graduating with extra credentials, such as a minor in business administration are available.

The information and computer technology program is accredited by the Association of Technology, Management, and Applied Engineering. Credit toward an information and computer technology major will not be given for any ICTN course with a grade less than C (2.0).

Minimum degree requirement is 126 124 126 s.h. credit as follows:

1. Foundations curriculum requirements including those listed below - 42 40 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum.)

- ECON 2113 - Principles of Microeconomics
- MATH 1065 - College Algebra or
• MATH 1066 - Applied Mathematics for Decision Making

• PHYS 1250 - General Physics
• PHYS 1251 - General Physics Laboratory
• PHYS 1260 - General Physics
• PHYS 1261 - General Physics Laboratory
• PSYC 1000 - Introductory Psychology
• PSYC 3241 - Personnel and Industrial Psychology

2. Lower division core - 24 s.h.

• ICTN 1500 - Information and Computer Technology Fundamentals
• ICTN 1501 - Information and Computer Technology Fundamentals Laboratory
• ICTN 2150 - Network Fundamentals
• ICTN 2151 - Network Fundamentals Laboratory
• ICTN 2154 - Digital Communication Systems
• ICTN 2155 - Digital Communication Systems Laboratory
• ICTN 2158 - Computer Networking Technology
• ICTN 2159 - Computer Networking Technology Laboratory
• ICTN 2510 - Network Environment I
• ICTN 2511 - Network Environment I Laboratory
• ICTN 2530 - Network Environment II
• ICTN 2531 - Network Environment II Laboratory
• ICTN 2732 - Scripting for Information Technology

• ITEC 2000 - Industrial Technology Applications of Computer Systems or
• ITEC 3000 - Internet Tools Technology

3. Upper division core - 24 26 s.h.

• ICTN 2900 - Fundamental Network Security
• ICTN 2901 - Fundamental Network Security Laboratory
• ICTN 3540 - Network Environment III
• ICTN 3541 - Network Environment III Laboratory
• ICTN 4000 - Network Internship
• ICTN 4020 - Senior Information and Computer Technology Capstone Design Project I
• ICTN 4022 - Senior Information and Computer Technology Capstone Design Project II
• ICTN 4040 - Enterprise Information Security
• IDIS 3790 - Technical Presentations
• ITEC 3290 - Technical Writing
• ITEC 3300 - Technology Project Management
4. Concentrations - 12 s.h.

(Choose one.)

Computer networking concentration:

- ICTN 3250 - Internetwork Routing Technology
- ICTN 3251 - Internetwork Routing Technology Laboratory
- ICTN 4150 - Switching Network Technology
- ICTN 4151 - Switching Network Technology Laboratory
- ICTN 4250 - Enterprise Network Security Technology
- ICTN 4251 - Enterprise Network Security Technology Laboratory
- ICTN 4590 - Network Maintenance and Troubleshooting
- ICTN 4591 - Network Maintenance and Troubleshooting Laboratory

Information security concentration:

- ICTN 4064 - Regulations and Policies
- ICTN 4200 - Intrusion Detection Technologies
- ICTN 4201 - Intrusion Detection Technologies Laboratory
- ICTN 4600 - Enterprise Information Technology Management
- ICTN 4601 - Enterprise Information Technology Management Laboratory
- ICTN 4800 - Information Assurance Technologies
- ICTN 4801 - Information Assurance Technologies Laboratory

Information technology concentration:

- ICTN 3900 - Web Services Management
- ICTN 3901 - Web Services Management Laboratory
- ICTN 4064 - Regulations and Policies
- ICTN 4520 - Wireless Communication
- ICTN 4521 - Wireless Communication Laboratory
- ICTN 4600 - Enterprise Information Technology Management
- ICTN 4601 - Enterprise Information Technology Management Laboratory
5. Cognates - 12 s.h.

- FINA 2244 - Legal Environment of Business
- ITEC 3200 - Introduction to Statistical Process Control or MATH 2283 - Statistics for Business
- ITEC 3800 - Cost and Capital Project Analysis or ACCT 2101 - Survey of Financial and Managerial Accounting or ACCT 2401 - Financial Accounting
- ITEC 4293 - Industrial Supervision or MGMT 3202 - Fundamentals of Management

6. Approved Electives to complete requirements for graduation.
HIST 4940 - Internship in Archives and Historical Records Administration

3 F,S

140 hours for 3 s.h. internship. Maximum of 3 s.h. in HIST 4940 - HIST 4948 may count toward HIST requirement for the minor in public history. **May not count toward HIST major or minor elective requirements above 2999.** P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision in archival and manuscript agencies.

HIST 4941 - Internship in Archives and Historical Records Administration

6 F,S

280 hours for 6 s.h. internship. Maximum of 3 s.h. in HIST 4940 - HIST 4948 may count toward HIST requirement for minor in public history. **May not count toward HIST major or minor elective requirements above 2999.** P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision in archival and manuscript agencies.

HIST 4942 - Internship in Archives and Historical Records Administration

9 F,S

420 hours for 9 s.h. internship. Maximum of 3 s.h. in HIST 4940 - HIST 4948 may count toward HIST requirement for minor in public history. **May not count toward HIST major or minor elective requirements above 2999.** P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision in archival and manuscript agencies.

HIST 4943 - Internship in Museum Administration

3 F,S

140 hours for 3 s.h. internship. Maximum of 3 s.h. in HIST 4940 - HIST 4948 may count toward HIST requirement for minor in public history. **May not count toward HIST major or minor elective requirements above 2999.** P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Start/End</th>
<th>Hours for Credit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 4944</td>
<td>Internship in Museum Administration</td>
<td>6</td>
<td>F,S</td>
<td>280 hours</td>
<td>May not count toward HIST requirement for minor in public history. May be counted toward HIST requirement for minor in public history. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.</td>
</tr>
<tr>
<td>HIST 4945</td>
<td>Internship in Museum Administration</td>
<td>9</td>
<td>F,S</td>
<td>420 hours</td>
<td>May not count toward HIST requirement for minor in public history. May be counted toward HIST requirement for minor in public history. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.</td>
</tr>
<tr>
<td>HIST 4946</td>
<td>Internship in Historic Site Administration</td>
<td>3</td>
<td>F,S</td>
<td>140 hours</td>
<td>May not count toward HIST requirement for minor in public history. May be counted toward HIST requirement for minor in public history. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.</td>
</tr>
<tr>
<td>HIST 4947</td>
<td>Internship in Historic Site Administration</td>
<td>6</td>
<td>F,S</td>
<td>280 hours</td>
<td>May not count toward HIST requirement for minor in public history. May be counted toward HIST requirement for minor in public history. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.</td>
</tr>
<tr>
<td>HIST 4948</td>
<td>Internship in Historic Site Administration</td>
<td>9</td>
<td>F,S</td>
<td>420 hours</td>
<td>May not count toward HIST requirement for minor in public history. May be counted toward HIST requirement for minor in public history. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.</td>
</tr>
</tbody>
</table>
History, BA

Minimum degree requirement is 126 120 s.h. of credit as follows:

1. Foundations curriculum requirements – 42 s.h. 40 s.h.

(For information about courses that carry foundations curriculum credit see Liberal Arts Foundations Curriculum.)

2. Demonstrated foreign language proficiency through level 1004 - 12 s.h.

(For information about the foreign language requirement see Additional Requirements for BA Degree and Placement Testing, Foreign Language.)

3. Core - 36 s.h.

- HIST 2000 - Introduction to History
- HIST 4000 - Senior Seminar

Choose 9 s.h. from the following:

- HIST 1030 - World Civilizations to 1500
- HIST 1031 - World Civilizations Since 1500
- HIST 1050 - American History to 1877
- HIST 1051 - American History Since 1877

Choose a minimum of 21 s.h. of electives above 2999, at least one 3 s.h. course from each area as listed below

elective requirements above 2999. P: Senior standing; minimum cumulative 2.2 GPA; minimum 2.5 GPA in HIST; consent of instructor. Practical field experience under supervision.
(Minimum of 3 s.h. must be taken at the 4001-5999 level, excluding HIST 4531, HIST 4532, HIST 4533, HIST 4550, HIST 4551):

American History:

- HIST 3010 - Constitutional History of the United States to 1888
- HIST 3011 - Constitutional History of the United States Since 1888
- HIST 3031 - Economic History of the United States Since 1865
- HIST 3100 - North Carolina History
- HIST 3110 - History of African-Americans
- HIST 3121 - American Military History to 1900
- HIST 3122 - American Military History Since 1900
- HIST 3140 - Women in American History
- HIST 3170 - History of Native Americans
- HIST 3200 - Diplomatic History of the United States
- HIST 3205 - History of American Urban Life
- HIST 3210 - Colonial America to 1763
- HIST 3215 - American Revolution and the Federal Era, 1763-1800
- HIST 3225 - The Era of Sectionalism and Civil War, 1848-1877
- HIST 3230 - The Birth of Modern America, 1865-1892
- HIST 3240 - The Age of Franklin Roosevelt, 1919-1945
- HIST 3245 - The United States Since 1945
- HIST 3260 - The United States and the Middle East, 1783 to the Present
- HIST 3907 - Pirate Nation: An ECU History
- HIST 3920 - Social History of American Medicine
- HIST 5122 - Social and Cultural History of the United States Since 1865
- HIST 5140 - The Old South
- HIST 5141 - The South Since 1877
- HIST 5220 - Selected Topics in US Women’s History
- HIST 5230 - Themes in African American History
- HIST 5520 - Maritime History of the Western World Since 1815
- HIST 5960 - Introduction to Oral History

European History:

- HIST 3405 - History of Ancient Greece to 146 BC
- HIST 3406 - War and Society in Ancient Greece and Rome
- HIST 3410 - History of Ancient Rome
- HIST 3412 - A History of Christianity to 1300
- HIST 3413 - A History of Christianity 1300-present
- HIST 3414 - The Celtic World, 700 BC-1601 AD
- HIST 3415 - The Middle Ages
- HIST 3420 - Early Modern Europe to 1648
- HIST 3430 - History of Europe, 1815-1914
- HIST 3435 - History of Europe Since 1914
• HIST 3444 - Old Regime and Revolutionary France
• HIST 3445 - Modern France, 1815-present
• HIST 3460 - Germany, 1790-1914
• HIST 3461 - Germany Since 1914
• HIST 3462 - History of the Holocaust
• HIST 3480 - Britain to 1688
• HIST 3482 - Britain, 1688-1832
• HIST 3484 - Britain from 1832
• HIST 3551 - Medieval Russia, 862-1682
• HIST 3552 - Imperial Russia, 1682-1917
• HIST 3553 - Soviet Russia, 1917-1991
• HIST 4400 - Science and Religion in Europe and America, 1600-1900
• HIST 4445 - The European Enlightenments
• HIST 4470 - The Great War: Experience, Memory and Legacy
• HIST 4500 - Political Culture and Community in Eighteenth-century Britain
• HIST 5350 - The Renaissance in European History
• HIST 5360 - The Reformation, 1450-1598
• HIST 5440 - Twentieth-Century England
• HIST 5450 - Tudor-Stuart England
• HIST 5470 - History of Soviet Russia Since 1917
• HIST 5480 - Weimar and the Rise of Hitler
• HIST 5505 - Maritime History of the Western World to 1415
• HIST 5555 - Constitutionalism and Kingship in Early Modern Europe
• HIST 5660 - Imperialism in Theory and Practice, 1800 to the Present

World History:

• HIST 3610 - History of East Asia to 1600
• HIST 3611 - History of East Asia Since 1600
• HIST 3615 - History of Traditional Japan
• HIST 3620 - History of Modern Japan
• HIST 3625 - Field Study in Japanese Historical Culture
• HIST 3626 - Field Study in Japanese Historical Texts
• HIST 3627 - History of Japanese Buddhism
• HIST 3629 - History of Traditional China
• HIST 3630 - History of Modern China
• HIST 3635 - Samurai History and Cinema
• HIST 3669 - History of the Middle East, 600-1500
• HIST 3670 - History of the Middle East Since 1500
• HIST 3680 - Women and Gender in the Middle East
• HIST 3710 - Introduction to Latin-American History: Colonial Period
• HIST 3711 - Introduction to Latin-American History: Since 1808
• HIST 3780 - Mexico and Central America
• HIST 3810 - History of Africa
• HIST 3820 - History of South Africa
• HIST 3830 - Africa and Islam
• HIST 4610 - History of Southeast Asia
- HIST 5300 - Comparative History of Non-Western Civilizations
- HIST 5340 - The Ancient Near East
- HIST 5680 - Diplomatic History of Modern Asia
- HIST 5765 - Latin America, 1492 to the Present

The following courses vary in content and will be classified according to topic:

- HIST 3005 - Selected Topics in History
- HIST 3350 - War and Society
- HIST 4531 - Directed Readings in History
- HIST 4532 - Directed Readings in History
- HIST 4533 - Directed Readings in History
- HIST 4550 - Honors
- HIST 4551 - Honors
- HIST 5005 - Selected Topics

4. Minor and electives to complete requirements for graduation.

Public History Minor

History courses used for the minor may not be counted toward history major. The minor requires **24 18 s.h.** credit as follows:

1. Required HIST courses - 6 s.h.

   - HIST 3900 - Introduction to Public History
   - HIST 3993 - Approaches to Historical Objects

2. Internships - 3 s.h.

   - HIST 4940 - Internship in Archives and Historical Records Administration
   - HIST 4943 - Internship in Museum Administration
   - HIST 4946 - Internship in Historic Site Administration

2. **3. HIST electives Electives** - 9 s.h.
(Choose from the following lists. At least 6 s.h. must be HIST)

HIST courses:

- HIST 3980 - Shipwreck Archaeology
- HIST 3985 - History of American Architecture
- HIST 4940 - Internship in Archives and Historical Records Administration
- HIST 4941 - Internship in Archives and Historical Records Administration
- HIST 4942 - Internship in Archives and Historical Records Administration
- HIST 4943 - Internship in Museum Administration
- HIST 4944 - Internship in Museum Administration
- HIST 4945 - Internship in Museum Administration
- HIST 4946 - Internship in Historic Site Administration
- HIST 4947 - Internship in Historic Site Administration
- HIST 4948 - Internship in Historic Site Administration
- HIST 5910 - Introduction to the Administration of Archives and Historical Manuscripts
- HIST 5920 - Techniques of Museum and Historic Site Development
- HIST 5921 - Techniques of Museum and Historic Site Development
- HIST 5930 - Field and Laboratory Studies in Museum and Historic Site Development
- HIST 5931 - Field and Laboratory Studies in Museum and Historic Site Development
- HIST 5960 - Introduction to Oral History
- HIST 5970 - Living History
- HIST 5985 - Historic Preservation Planning

3. Cognates—9 s.h. Cognate courses:

- ANTH 2000 - Archaeology Around the World
- ARTH 2905 - Masterpieces in the Visual Arts and Literature
- ARTH 1906 - Art History Survey
- ARTH 1907 - Art History Survey
- ARTH 4948 - Art of the United States
- ENGL 3870 - Introduction to Editing and Publishing
- IDSN 2700 - Historic Interiors I: 3000 BC Through Mid-Nineteenth Century
- IDSN 2750 - Historic Interiors II: Late Nineteenth and Twentieth Centuries