



Academic Notes

March 15, 2010

AN 2009-2010

ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

Below is the circulation schedule for the electronic copy of *Academic Notes* through May 10, 2010. All submissions for inclusion in *Academic Notes* are due in the Office of Academic Affairs no later than 10:00 a.m. on the Wednesday prior to the distribution of *Academic Notes* on the following Monday. Submissions must be in hard copy along with an e-mail, disk, or CD with the same information. The electronic version must be formatted either in Word with pages with signatures scanned and inserted as a picture OR PDF saved as text and image. (Do NOT send PDF just saved as an image.) Information submitted to *Academic Notes* that is not accompanied by an electronic version or that is incomplete or unusable will be returned to the appropriate office. *Academic Notes* is available using Acrobat Reader at http://www.indstate.edu/academicaffairs/academic_notes.htm

ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

<u>Deadline for Items</u>	<u>Issue Date</u>
March 17	March 22
March 24	March 29
March 31	April 5
April 7	April 12
April 14	April 19
April 21	April 26
April 28	May 3
May 5	May 10

ACALOG NOTE

The format for curriculum proposals has changed to correspond with the structure of Acalog, the new version of the electronic catalogs. Some proposals will be published under the old structure and some under the new structure during this transition period.

Improved Electronic Catalog

The new electronic version of the undergraduate catalog is posted at <http://www.indstate.edu/academics/catalogs.htm> Some advantages of the new format are:

- It is easily searchable and searchable from the internet
- It is easier for students and advisors to find and choose the courses students need
- Students create a personal portfolio of courses in which they are interested

- Links to information such as department web sites, advising information, and video clips can easily be added
- Every page can easily be printed.

If you have questions, please contact Academic Affairs, extension 3662.

CURRICULUM

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UNDERGRADUATE PROPOSALS

COURSE REVISIONS

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

ECT 406 - Computer Systems Integration

3 credits

The factory floor to the business enterprise and the process-to-enterprise chain are parts of computer-based system integration. Students study the methodology for accomplishing the system integration process and apply concepts through case-study exercises.

Prerequisites: ECT 306

Change title, description, and prerequisites to:

ECT 406 – Senior Project

3 credits

Students work in group on a design/research problem. The project could be developed through industry collaboration, faculty research, or at the students' own initiative through literature search. The project requires computer engineering technology faculty approval, formal oral presentation and written report.

Prerequisite: senior standing

A-F Grading

Preferred effective term: Spring 2011

COURSE REVISIONS **FOUNDATIONAL STUDIES CREDIT**

COLLEGE OF ARTS AND SCIENCES: Music

MUS 150 - Introduction to Musical Traditions I

2 credits

Historical survey of musical style in Western art music from the Middle Ages to the present, with emphasis on critical listening and score reading. Includes introduction to basic research and writing skills pertaining to music. The ability to read music is essential.

Note: Three class hours a week.

General Education Credit: [GE2000: Literary, Artistic, and Philosophical Studies-Elective]

Change General Education Credit to Foundational Studies Credit:

MUS 150 - Introduction to Musical Traditions I

2 credits

Historical survey of musical style in Western art music from the Middle Ages to the present, with emphasis on critical listening and score reading. Includes introduction to basic research and writing skills pertaining to music. The ability to read music is essential.

Note: Three class hours a week.

Foundational Studies Credit: [FS 2010: Fine and Performing Arts]

Preferred effective term: Fall 2010

PROGRAM REVISIONS

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

Computer Engineering Technology Major (71 credits)

CIP Code: 151291 Major Code: D731

Brief Summary:

Based on a change in accreditation requirements the Technical Electives (6 hrs.) has been eliminated.

The new Foundational Studies program effective Fall 2010 has necessitated a minor wording change to the Computer Engineering Technology program, as well as a change in the number of hours counted in the major. The wording 'Directed Basic Studies' was replaced with 'Directed Foundational Studies.' Because MATH 115 is now part of Directed Foundational Studies its 3 hours must be counted in the total number of program hours.

The above two items have changed the total number of hours from 71 to 68.

Student Learning:

Student learning is not impacted by this change.

Proposed Catalog Copy:

Computer Engineering Technology Major (68 credits)

CIP Code: 151291 Major Code: _____

Program Mission

The mission of the Computer Engineering Technology Program at Indiana State University is to prepare students for careers as technical professionals in an environment that involves applications in design, manufacturing, control, and integration of electro-mechanical products or systems, and requires a practical problem-solving approach emphasizing hands-on skills with modern productivity tools (e.g. design, analysis, control, diagnostic, and project management tools).

Program Educational Objectives

Graduates of the Indiana State University Computer Engineering Technology Program are expected to be able to demonstrate:

1. Technical competency and technical proficiency by applying general and disciplinary reasoning and critical thinking to identify, analyze, and solve problems.
2. Communication skills in both oral and written form to articulate technical knowledge, ideas, and proposals to peers, senior management, and other potentially diverse audience.
3. Managerial organizational skills, and increasing managerial skills at higher levels of management in their chosen field.
4. Ethical, social, and professional responsibility through an awareness of the impact of professional, ethical, and social responsibility in the practice of engineering technology in the State of Indiana and in a diversified world.
5. Teamwork mentality through the ability to function effectively and think independently in a multi-disciplinary team environment.
6. Lifelong learning by a continuing individual desire and commitment to remain technically current by engaging in continuous self-improvement and lifelong learning.

Student Learning Outcomes

The Computer Engineering Technology Program learning outcomes are developed to fulfill program educational objectives, encompass **the Technology Accreditation Commission/Accreditation Board for Engineering and Technology, Inc.** general criteria, and address specific criteria for a computer engineering technology program. To this end, the following outcomes have been developed to represent the desired capabilities of students who, upon graduation, should have the ability to:

1. Apply principles of mathematics, science, engineering technology, and programming languages to solve technical problems in broad technical areas including digital systems, computer hardware, electronics, and networking.
2. Use modern computational and simulation tools for technical problem solving, analysis, and design.
3. Incorporate systematic methods and emerging technology to identify, formulate, and generate original solutions within the fields of computer engineering technology.
4. Conduct experiments competently in a laboratory setting including making measurement and operating equipments; collecting and critically examine data; interpreting, reporting, and applying results for the purpose of understanding and improving practical systems.
5. Apply fundamental management principles and techniques in business operations, and display leadership qualities in organizing teams and reconciling differences.
6. Understand the impact of technology in a global and social context, and develop professional and ethical responsibility.
7. Engage in lifelong learning to pursue increasing knowledge of current and emerging technical and non-technical issues.
8. Communicate effectively and respectfully with members of various backgrounds and personalities in multi-disciplinary teams, and to value and respect cultural diversity.
9. Communicate with clarity and conciseness both verbally and in writing with peers, clients, and targeted audience.

Required Courses:

Electronics and Computer Technology Courses (45 credits):

- ECT 130 - Introduction to Electronics and Computer Technology 2 credits
- ECT 165 - D.C. Circuits and Design 3 credits *
- ECT 167 - A.C. Circuits and Design 3 credits *
- ECT 168 - Computer Design Technology 3 credits *
- ECT 231 - Digital Computer Logic 3 credits
- ECT 232 - Digital Computer Circuits 3 credits *
- ECT 281 - Robotic Controls 3 credits *
- ECT 301 - Computer Network Management Technology 3 credits *
- ECT 303 - Microcontroller Hardware and Software 3 credits *
- ECT 306 - Technical Data Management and Applications 3 credits
- ECT 308 - Microcontroller Applications and Interfacing 3 credits *
- ECT 401 - Data Communications and Internet Technology 3 credits
- ECT 403 - Practical Digital Logic Design 3 credits *
- ECT 406 - Computer Systems Integration 3 credits
- ECT 430 - Senior Seminar 1 credits
- ECT 437 - Industrial Computer Systems Management 3 credits

Management (6 credits from courses such as):

- MET 404 - Engineering Design and Management 3 credits
- MET 405 - Economic Analysis for Engineering and Technology 3 credits
- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits

Mathematics/Computer Science and Physical Science Requirements (14 credits):

Courses in Physics, Chemistry, Biology, or Geology– 8 credits

CS 256 - Principles of Structured Design 3 credits
(or higher level structured language.)

MATH 301 - Fundamentals and Applications of Calculus 3 credits

Directed Foundational Studies (3 credits)

Quantitative Literacy: MATH 115 - College Algebra and Trigonometry 3 credits

Note: *Denotes a course having a laboratory component requiring additional contact hours.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology**Electronics Technology Major (82 credits)**

CIP Code: 150303 Major Code: D730

Brief Summary:

The change to Electronics Engineering Technology is a better representation of the actual degree program. Over the past twenty years, names for this type of program have varied from Technology to Engineering Technology. In order to remain competitive, it is important to modify the name of the program to parallel that which students are familiar with especially at the two year institutions that many are articulating from. Schools as; IUPU -FW, Lincoln College, ITT Technical Institute, IVY Tech and Vincennes University now use the title Engineering or Engineering Technology for their programs as opposed to just Technology.

The Electronics Technology Degree has been accredited by the National Association of Industrial Technology (NAIT) for over thirty years. NAIT recently reorganized and changed their name to the Association of Technology, Management, and Applied Engineering (ATMAE). NAIT did not allow the use of the term “Engineering Technology” for an accredited program. The change in organization to ATMAE included a paradigm shift that has lifted that restriction and the organization now embraces the term as part of their foundation. The Electronics Technology program is undergoing re-accreditation this year. Plans in the next year include the seeking of accreditation through ABET, formally the Accreditation Board of Engineering and Technology. ABET provides a clear path for accreditation of the EET program. At the November meeting of our Industrial Advisory Board, they voted unanimously to change the name to Electronics Engineering Technology. Graduate surveys show that the majority of

students hold positions with “engineer” in the title.

Changes in program content are minimal at this time with only a change to reflect the Foundational Studies requirements, and a reduction in electives required due to changes in ATMAE requirements.

Student Learning:

Student learning is not impacted by these changes.

Proposed Catalog Copy:

Electronics Engineering Technology Major (80 credits)

CIP Code: 150303 Major Code: _____

Required Courses:

Electronics Technology Courses (42 credits):

- ECT 130 - Introduction to Electronics and Computer Technology 2 credits
- ECT 165 - D.C. Circuits and Design 3 credits *
- ECT 167 - A.C. Circuits and Design 3 credits *
- ECT 221 - Circuit Analysis I 3 credits
- ECT 231 - Digital Computer Logic 3 credits
- ECT 232 - Digital Computer Circuits 3 credits *
- ECT 321 - Circuit Analysis II 3 credits
- ECT 324 - Discrete Transistor Theory and Circuit Design 3 credits *
- ECT 325 - Analog Integrated Precision Circuits 3 credits *
- ECT 343 - Industrial Electronic Pulse Circuits 3 credits *
- ECT 421 - Circuit Analysis by Calculus 3 credits
- ECT 430 - Senior Seminar 1 credits
- ECT 437 - Industrial Computer Systems Management 3 credits
- ECT 444 - Programmable Logic Controllers and Control Systems 3 credits *
- ECT 448 - Industrial Electronic Current Control Systems 3 credits *

Mechanical Engineering Technology (6 credits):

- MET 103 - Introduction to Technical Graphics with CAD 3 credits
- MET 329 - Fluid Power Technology 3 credits

Technology Management (9 credits):

- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits

Required elective (3 credits):

Select one from the following:

- ECT 280 - Introduction to Automation 3 credits
- ECT 281 - Robotic Controls 3 credits *
- MFG 370 - Fundamentals of Manufacturing Processes 3 credits
- MFG 371 - Manufacturing Processes and Materials 3 credits

Mathematics/Computer Science and Physical Science Requirements (14 credits):

- Courses in Physics, Chemistry, Biology, or Geology 8-hrs.
- CS 256 - Principles of Structured Design 3 credits
(or higher level structured language.)
- MATH 301 - Fundamentals and Applications of Calculus 3 credits

Technical Elective (3 credits)

Directed Foundational studies (3 credits):

- Quantitative Literacy: MATH 115 - College Algebra and Trigonometry 3 credits

*Denotes a course having a laboratory component requiring additional contact hours.
Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Advanced Manufacturing Management Major (73 credits)

CIP Code: 150613 Major Code: E534

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Advanced Manufacturing Management program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies', and CS 151 was moved from 'Directed Liberal Studies' to the 'Directed Electives' area of the program. TMGT 195 was removed since it is no longer part of Foundational Studies. MATH 111 was removed from the directed Quantitative Literacy area since Met 215 now fulfills the requirement on its own.

Student Learning:

Student learning is not impacted by these changes.

Proposed Catalog Copy:

Advanced Manufacturing Management Major (76 credits)

CIP Code: 150613 Major Code: _____

Required Courses:

Electronics and Computer Technology (12 credits):

- ECT 160 - Electronic Fundamentals 3 credits
- ECT 280 - Introduction to Automation 3 credits
- ECT 281 - Robotic Controls 3 credits
- Choose one of the following:**
- ECT 444 - Programmable Logic Controllers and Control Systems 3 credits
- ECT 480 - Applications of Robotic and Automation Systems 3 credits

Manufacturing (12 credits):

- MFG 225 - Introduction to Materials, Processes, and Testing 3 credits
- MFG 370 - Fundamentals of Manufacturing Processes 3 credits
- MFG 371 - Manufacturing Processes and Materials 3 credits
- MFG 376 - Computer Numerical Control Systems 3 credits

Mechanical Engineering Technology (9 credits):

- MET 103 - Introduction to Technical Graphics with CAD 3 credits
- MET 203 - Introduction to Solid Modeling 3 credits
- MET 329 - Fluid Power Technology 3 credits

Technology Management (24 credits):

- TMGT 131 - Introduction to Manufacturing Technology 2 credits
- TMGT 351 - Professional Internship 3 credits
- TMGT 374 - Lean Manufacturing Systems 3 credits
- TMGT 430 - Senior Seminar 1 credits
- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 473 - Quality Control of Industrial Products I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits
- TMGT 497 - Problem Solving Techniques: A Team Approach 3 credits

Directed Electives (9 credits):

- HLTH 318 - Industrial Accident Prevention I 3 credits
- Physical Science 3 credits
- CS 151 - Introduction to Computer Science 3 credits

Directed Foundational Studies (10 credits):

Laboratory Science:

- PHYS 101 - Introduction to the Physical Sciences 3 credits
- PHYS 101L - Introduction to the Physical Sciences Laboratory 1 credits

Social or Behavioral Studies:

- ECON 100 - Basic Economics 3 credits

Quantitative Literacy – choose one of the following:

- MATH 115 - College Algebra and Trigonometry 3 credits
- MET 215 - Graphic Analysis 3 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management**Construction Management Major (86 credits)**

CIP Code: 150101 Major Code: E530

Brief Summary:

The new Foundational Studies Program effective Fall 2010 has necessitated some minor changes

to the Construction Management Program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies', and two of the courses that were previously in the Social and Behavioral Studies area were moved into the major. TMGT 195 was removed since it is no longer part of Foundational Studies, and PHYS 106/L was removed as an option under Laboratory Science so that the two required lab courses will come from different science disciplines, thus meeting the Foundational Studies requirement. MATH 241 was previously listed as Directed Basic Studies and is now grouped with program courses. MATH 115 or MET 215 were previously listed with program courses and are now listed with Directed Foundational Studies.

Student Learning:

N/A

Proposed Catalog Copy:

Construction Management Major (89 credits)

CIP Code: 150101 Major Code: _____

Required Courses:

Construction Management (50 credits):

- CNST 101 - Introduction to Construction Management 2 credits
- CNST 106 - Architectural Graphics 3 credits
- CNST 111 - Construction Materials, Methods, and Equipment 3 credits
- CNST 201 - Construction Contract Documents and Project Delivery 3 credits
- CNST 213 - Environmental and Mechanical Systems for Buildings 3 credits
- CNST 214 - Plan Interpretation and Quantity Take-Off 3 credits
- CNST 304 - Construction Scheduling 3 credits
- CNST 306 - Commercial Design and Construction 3 credits
- CNST 310 - Construction Safety 3 credits
- CNST 314 - Estimating and Bid Preparation 3 credits
- CNST 318 - Strength of Building Materials 3 credits
- CNST 320 - Soil Analysis and Testing 3 credits
- CNST 414 - Construction Quality Control and Assurance– 3 credits
- CNST 418 - Design of Temporary Structures 3 credits
- CNST 420 - Plane Surveying 3 credits
- CNST 450 - Construction Management 3 credits

Choose one from the following:

- CNST 218 - Statics 3 credits
- MET 302 - Applied Statics 3 credits

Electronics and Computer Technology (3 credits):

- ECT 369 - Electrical Construction 3 credits

Technology Management (10 credits):

TMGT 351 - Professional Internship 3 credits
TMGT 430 - Senior Seminar 1 credits

Choose one from the following:

BUS 263 - Legal Environment and Business 3 credits
TMGT 429 - Workplace Law for the Technical Manager 3 credits

Choose one from the following:

MGT 301 - Survey of Management 3 credits
TMGT 492 - Industrial Supervision 3 credits

Accounting (3 credits):

ACCT 200 - Survey of Accounting 3 credits

Management (3 credits):

MGT 140 – Introduction to Business 3 credits

Economics (3 credits):

ECON 351 – Survey of Labor Economics 3 credits

Mathematics (3 credits):

MATH 241 3 credits

Directed Foundational Studies (14 credits):

Quantitative Literacy – Choose one of the following:

Math 115 – College Algebra & Trigonometry 3 credits

MET 215 – Graphic Analysis 3 credits

Laboratory Science:

PHYS 105 - General Physics I 3 credits

PHYS 105L - General Physics I Laboratory 1 credit

and

CHEM 105 - General Chemistry I 3 credits

CHEM 105L - General Chemistry I Laboratory 1 credit

Social or Behavioral Sciences:

ECON 100 – Basic Economics 3 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Packaging Major (65 credits)

CIP Code: 150612 Major Code: E533

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Packaging program. The wording 'Directed Basic Studies' and 'Directed Liberal Studies' was replaced with 'Directed Foundational Studies'. Phys 106/L was removed as an option under Laboratory Science so that all students will take Chem 100/L, thus meeting the Foundational Studies requirement. Phys 105/L is now listed with the major courses and MET 215 was added as an option along with Math 115 under Directed Foundational Studies.

On the recommendation of the program Advisor Board, Math 241 was added to provide students with a background in statistics. MET 329 and MET 333 were removed from the program because the committee believes the components of those courses needed by Packaging majors can be covered in PKG 486 'Packaging Machinery Systems'.

Student Learning:

The advisory committee evaluated current assessment data and the body of knowledge required in the packaging industry as the basis for these changes. Ongoing assessment will determine the success of these changes.

Proposed Catalog Copy:

Packaging Major (65 credits)

CIP Code: 150612 Major Code: _____

Packaging (24 credits):

- PKG 180 - Introduction to Packaging Design 3 credits
- PKG 280 - Packaging Materials and Testing I 3 credits
- PKG 380 - Packaging Materials and Testing II 3 credits
- PKG 381 - Environmental Issues of Packaging 3 credits
- PKG 482 - Package Development and Analysis 3 credits
- PKG 484 - Distribution Packaging Design, Analysis and Testing 3 credits
- PKG 486 - Packaging Machinery Systems 3 credits
- PKG 489 - Packaging Industry Projects 3 credits

Manufacturing (3 credits):

- Choose one from the following:
- MFG 370 - Fundamentals of Manufacturing Processes 3 credits
 - MFG 371 - Manufacturing Processes and Materials 3 credits
 - MFG 372 - Plastics Technology 3 credits

Mechanical Engineering Technology (3 credits):

- MET 103 - Introduction to Technical Graphics with CAD 3 credits

Technology Management (21 credits):

- TMGT 131 - Introduction to Manufacturing Technology 2 credits
- TMGT 351 - Professional Internship 3 credits
- TMGT 429 - Workplace Law for the Technical Manager 3 credits
- TMGT 430 - Senior Seminar 1 credits
- TMGT 471 - Production Planning and Control I 3 credits
- TMGT 473 - Quality Control of Industrial Products I 3 credits
- TMGT 478 - Industrial Organization and Functions 3 credits
- TMGT 492 - Industrial Supervision 3 credits

Mathematics (3 credits):

- MATH 241 – Principles of Statistics 3 credits

Physics (4 credits):

- PHYS 105 - General Physics I 3 credits
- PHYS 105L - General Physics I Laboratory 1 credits

Directed Foundational Studies (7 credits):

- Quantitative Literacy – Choose one of the following:
 - MATH 115 - College Algebra and Trigonometry 3 credits
 - MET 215 – Graphic Analysis 3 credits
- Laboratory Science
 - CHEM 100 - Chemistry: Reactions and Reason 3 credits
 - CHEM 100L - Chemistry: Reactions and Reason Laboratory 1 credits

Preferred effective term: Fall 2010

COLLEGE OF TECHNOLOGY: Technology Management

Construction Management Minor (19 credits)

CIP Code: 150101

Brief Summary:

The new Foundational Studies program effective Fall 2010 has necessitated some minor changes to the Construction Management Minor. The wording ‘Directed Basic Studies’ and ‘Directed Liberal Studies’ was replaced with ‘Directed Foundational Studies’, and PHYS 105/L was moved out of the Foundational Studies area since it is not part of that array.

Student Learning:

N/A

Proposed Catalog Copy:

Construction Management Minor (22 credits)

Required Courses:

Construction Management (12 credits):

- CNST 111 - Construction Materials, Methods, and Equipment 3 credits
- CNST 201 - Construction Contract Documents and Project Delivery 3 credits
- CNST 214 - Plan Interpretation and Quantity Take-Off 3 credits
- CNST 414 - Construction Quality Control and Assurance– 3 credits

Physical Science (7 credits):

- PHYS 105 - General Physics I 3 credits
- PHYS 105L - General Physics I Laboratory 1 credits

Choose one from the following:

- CNST 310 - Construction Safety 3 credits
- HLTH 314 - Industrial Health and Safety Legislation 3 credits

Directed Foundational Studies (3 credits):

- MATH 115 - College Algebra and Trigonometry 3 credits
- Preferred effective term: Fall 2010*

PROGRAM ELIMINATION

COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

A.S. Electronics and Computer Technology CIP Code: 150303 Major Code: D712

Brief Summary:

The Electronics, Computer, and Mechanical Engineering Technology department wishes to eliminate the 2-year A.S. degree in Electronics and Computer Technology. This degree program no longer fits into the University's long term plan for degree offerings, and current and expected enrollments do not indicate the need to continue this program.

Preferred effective term: Fall 2010

GRADUATE PROPOSALS

PROGRAM REVISIONS

BAYH COLLEGE OF EDUCATION: Curriculum, Instruction, and Media Technology

Ph.D. Curriculum and Instruction (72 credits minimum) CIP Code: 130301 Major Code: 8394

Brief Summary:

In the previous revision of the Ph.D. program, the purpose was to take advantage of the newly established concentrations in Banner to move from multiple majors with Ph.D. in Curriculum and Instruction (each specialization having its own major code) to one major code with multiple concentrations. This limited major codes while allowing us to track student data in each concentration. The purpose of this proposal is to add another concentration (literacy education) to the Ph.D.

In addition, this proposal also seeks to list in catalog copy another option to the CIMT electives for the major (CIMT 665 - previously approved course), and recommended ELAF courses in the Teaching and Learning concentration (ELAF 686 - previously approved course). It also includes recommended ELED and SPED courses in the Literacy concentration (all previously approved courses.)

Brief Summary:

In the previous revision of the Ph.D. program, the purpose was to take advantage of the newly established concentrations in Banner to move from multiple majors with Ph.D. in Curriculum and Instruction (each specialization having its own major code) to one major code with multiple concentrations. This limited major codes while allowing us to track student data in each concentration. The purpose of this proposal is to add another concentration (literacy education) to the Ph.D.

In addition, this proposal also seeks to list in catalog copy another option to the CIMT electives for the major (CIMT 665 - previously approved course), and recommended ELAF courses in the Teaching and Learning concentration (ELAF 686 - previously approved course). It also includes recommended ELED and SPED courses in the Literacy concentration (all previously approved courses.)

Student Learning:

The proposal for the addition of the literacy education concentration is not driven by student assessment outcomes. Rather, it is driven by a need nationwide for professionals able to develop and deliver educational programs for preservice and inservice teachers who are tasked with developing reading and reading comprehension skills for k-12 pupils and adult learners. The format of the current Ph.D. program in Curriculum and Instruction provides a logical foundation to address this need.

The Ph.D. in Curriculum and Instruction allows for substantive coursework in both curriculum and instruction (minimum of 24 credits), and in the area of concentration, in this case, literacy education (minimum of 24 credits). Moreover, the program allows for advisement in the area of concentration by content/discipline faculty in addition to advisement by the Dept. of Curriculum, Instruction, and Media Technology. The dissertation allows for further inquiry into literacy education, and guidance may be provided by both secondary (CIMT) and elementary (EASE) faculty.

Proposed Catalog Copy:

Ph.D. Curriculum and Instruction (72 credits minimum)

CIP Code: 130301 Major Code: _____

Degree Requirements:

A. Foundational Studies (6 credits minimum)

To develop competencies through understanding of contributions from philosophical, sociological, historical, and psychological foundations of education.

Courses:

Doctoral Level Foundations Course (3 credits)

Foundations Specific Elective (3 credits)

B. Inquiry Studies (12 credits minimum)

To develop competency in statistics, measurement, and research in education.

Courses:

CIMT 610 (3 credits) required

CIMT 800B (3 credits) required

Choose one of the following groups:

Quantitative Analysis: EPSY 612 (3 credits), EPSY 712 (3 credits); minimum grade of “B” required in each course

OR

Qualitative Analysis: EPSY 710 (3 credits), EPSY 711 (3 credits); minimum grade of “B” required in each course

C. Core Area—Curriculum and Instruction (24 credits minimum)

To provide the knowledge and understanding essential to every specialist in curriculum, instruction, and supervision.

Courses:

Curriculum: CIMT 660 (3 credits), CIMT 860 (3 credits)

Design: CIMT 620 (3 credits), CIMT 720 (3 credits)

Instruction: CIMT 862 (3 credits), CIMT 868 (3 credits)

C&I: Content specific and/or directed electives (6 credits). Recommended electives include CIMT 665 (3 credits), 675 (3 credits), 689 (3 credits), 740 (3 credits), 770 (3 credits), 864 (3 credits), 866 (3 credits).

D. Area of Concentration (24 credits minimum)

To enable the student to develop either (a) further study in curriculum, instruction, or supervision, or (b) a specialized program emphasizing an academic area as appears below. Below are the approved concentrations. If a course or set of courses is required, that notation appears with the area of concentration.

Early Childhood Education

Educational Technology

Elementary Education

English Education

A balance of course work in the three main subdivisions of English studies (literature, language, composition/rhetoric) is required in this area. Five courses in the Department of English provide students with an overview of English studies: English 601A, 635, 685A, 685B, and 685C. Other English course requirements in this area are broadly defined, allowing students to specialize in composition or an area of literature.

History Education

Courses in the area of application must include at least one two-course sequence (6 credits) from Section 1, a minimum of 3 credits (History 650 required) and a maximum of 9 credits from Section 2, a minimum of 3 credits from Section 3, and a minimum of 3 credits from Section 4.

Section 1

- a. History 620, Proseminar: The United States-3 hrs., and History 621, Seminar: The United States-3 credits
- b. History 660, Proseminar: Modern Europe-3 hrs., and History 661, Seminar: Modern Europe-3 credits
- c. History 670, Proseminar: The Wider World-3 hrs., and History 671, Seminar: The Wider World-3 credits

Section 2

- a. History 650, Historical Method and Theory-3 credits
- b. Social Sciences 604, Improving Social Science Instruction-2-3 credits
- c. Social Sciences 605, Seminar in Social Studies Education-1-6 credits
- d. Social Sciences 606, Social Studies Curriculum-2-3 credits
- e. Social Sciences 607, Instructional Materials in Social Studies-2-3 credits
- f. Social Sciences 608, Readings in Social Science Education-1-3 credits

Section 3

- a. History 622, Seminar on Popular Movements in the United States I-3 credits
- b. History 623, Proseminar: Topics in United States History-3 credits
- c. History 690, History Workshop-1-6 credits
- d. History 695, Readings in History-2-3 credits

Section 4

- a. History 720, Major Issues in United States History-3 credits
 - b. History 782, Major Issues in World History-3 credits
- Industrial Technology Education

Math Education

Secondary Education

Language Education

Post Secondary Teaching and Learning

Recommended courses:

ELAF 686 - Academic Leadership in Higher Education

ELAF 687 - Higher Education in the United States

ELAF 752 - Organization and Governance in Higher Education

ELAF 763 - Seminar on Students in Higher Education

Special Education

The concentration in special education requires 24 graduate credits in the field of special education. Students will take 12 credits from:

SPED—690 Directed Study in Special Education

SPED—695 Research in Special Education

SPED—698 Advanced Topics in Special Education

SPED—685 Grant Development and Program Evaluation

SPED—790 Individual Research and Study

An additional 12 credits in graduate courses as directed by the doctoral committee are required to complete additional prerequisite course work.

Literacy Education

The concentration in literacy education requires a minimum of 24 graduate credits in the fields of literacy education. Students will complete:

ELED 670—Leadership of Reading Programs

ELED 681—Literacy Assessment

ELED 682—Action Research in Elementary Education

ELED 685—Literacy Intervention Strategies

SPED 685—Grant Development and Program Evaluation

ELED 686—Building Innovative Curriculum in Literacy (Writing)

ELED 690—Individual Study in Elementary Education

ELED 890—Individual Research and Study

E. Related Studies (0-6 credits)

Courses from content areas may be selected to enhance special competencies in the area of specialization. Independent study, field experiences, and internship assignments are utilized in this program as a means for achieving thorough preparation and competence. The final program for each student is cooperatively developed by the student, the advisor, and the doctoral committee.

Preferred effective term: Fall 2010

UNDERGRADUATE APPROVALS

COURSE REVISIONS

BAYH COLLEGE OF EDUCATION: Elementary, Early, and Special Education

ELED 200 - Best Practices in Teaching

2 credits

Students examine the role of the elementary teacher and the philosophical and practical elements of effective teaching demonstrated through best practice. This course introduces students to multiple instructional strategies and allow students to reflect upon their ideal usage in the elementary classroom. Required field work provides opportunities for structured observations in educational settings.

Prerequisites: successful completion of ELED 101.

Remove prerequisite and add note to:

ELED 200 - Best Practices in Teaching

2 credits

Students examine the role of the elementary teacher and the philosophical and practical elements of effective teaching demonstrated through best practice. This course introduces students to multiple instructional strategies and allow students to reflect upon their ideal usage in the elementary classroom. Required field work provides opportunities for structured observations in educational settings.

Note: enrollment by departmental permission only.

A-F Grading

Preferred effective term: Fall 2010

ELED 259 - Measurement and Evaluation in the Elementary School

2 credits

This course is designed to assist the classroom teacher in developing skills to: gather information in a variety of ways (including observation, teacher-made tests, and standardized tests); critique and select appropriate assessment methods and materials; relate evaluation results to instruction; and foster effective communication of evaluations to parents.

Prerequisites: admission to BCP-I and successful completion of Phase I.

Change prerequisites and add note to:

ELED 259 - Measurement and Evaluation in the Elementary School

2 credits

This course is designed to assist the classroom teacher in developing skills to: gather information in a variety of ways (including observation, teacher-made tests, and standardized tests); critique and select appropriate assessment methods and materials; relate evaluation results to instruction; and foster effective communication of evaluations to parents.

Prerequisites: admission to BCP-I.

Note: enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

ELED 392 - The Teaching of Elementary School Social Studies

3 credits

An overview of the social studies curriculum of the elementary school with emphasis on teaching-learning techniques and experiences, selection of content, skill development, and uses of instructional materials. Required laboratory work involves experiences with elementary children.

Prerequisites: admission to BCP-I and successful completion of Phases I and II.

Change prerequisites and add note to:

ELED 392 - The Teaching of Elementary School Social Studies

3 credits

An overview of the social studies curriculum of the elementary school with emphasis on teaching-learning techniques and experiences, selection of content, skill development, and uses of instructional materials. Required laboratory work involves experiences with elementary children.

Prerequisites: admission to BCP-I.

Note: enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

ELED 394 - The Teaching of Elementary School Mathematics

3 credits

An overview of the mathematics curriculum of the elementary school with emphasis on activities, materials, devices, and teaching-learning techniques appropriate for children. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I; successful completion of Phases I and II.

Change prerequisites and add note to:

ELED 394 - The Teaching of Elementary School Mathematics

3 credits

An overview of the mathematics curriculum of the elementary school with emphasis on activities, materials, devices, and teaching-learning techniques appropriate for children. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I.

Note: enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

ELED 397 - Teaching Developmental Reading and Other Language Arts

3 credits

Emphasis is placed on teaching-learning techniques and uses of instructional materials for developing foundations of reading skills instruction and oral and written language programs in the elementary school. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I and successful completion of Phases I and II.

Change prerequisites and add note to:

ELED 397 - Teaching Developmental Reading and Other Language Arts

3 credits

Emphasis is placed on teaching-learning techniques and uses of instructional materials for developing foundations of reading skills instruction and oral and written language programs in the elementary school. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I.

Note: enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

ELED 398 - Corrective Reading in the Classroom

3 credits

Analysis, diagnosis, prescription, and correction of reading problems in the elementary school classroom with emphasis on types of treatment and methods for aiding children with learning difficulties. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I and successful completion of Phases I and II.

Change prerequisites and add note to:

ELED 398 - Corrective Reading in the Classroom

3 credits

Analysis, diagnosis, prescription, and correction of reading problems in the elementary school classroom with emphasis on types of treatment and methods for aiding children with learning difficulties. Required laboratory work involves experiences with elementary pupils.

Prerequisites: admission to BCP-I.

Note: Enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

ELED 400 - Theory to Practice

3 credits

This course complements the Teachers of Tomorrow Advancing Learning Program internship semester by scaffolding the intern's full-time supervised work in a school setting with an in-depth study of the culture of elementary schools. All aspects of teaching and learning are discussed with particular attention to best practice principles. Requires a specified number of

hours in an elementary classroom.

Prerequisites: admission to BCP-I and successful completion of Phases I and II.

Change prerequisites and add note to:

ELED 400 - Theory to Practice

3 credits

This course complements the Teachers of Tomorrow Advancing Learning Program internship semester by scaffolding the intern's full-time supervised work in a school setting with an in-depth study of the culture of elementary schools. All aspects of teaching and learning are discussed with particular attention to best practice principles. Requires a specified number of hours in an elementary classroom.

Prerequisites: admission to BCP-I.

Note: Enrollment by departmental permission only.

A-F Grading

Preferred effective term: Summer I 2010

SPED 200 - Students with Mild Intervention Needs

3 credits

A description of students whom the schools are likely to identify as having mild intervention needs. For categories of exceptionality, content will include characteristics, etiology, identification procedures, procedures for educational and placement decisions, and provision of services. Field experiences will be included. To be taken concurrently with Elementary Education 100.

Prerequisites: SPED 102 and admission to BCP-I.

Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.

Change description, prerequisites, and note to:

SPED 200 - Students with Mild Intervention Needs

3 credits

A description of students whom the schools are likely to identify as having mild intervention needs. For categories of exceptionality, content will include characteristics, etiology, identification procedures, procedures for educational and placement decisions, and provision of services. Field experiences will be included.

Prerequisites: admission to BCP-I.

Note: all special education courses may require observation and participation in field experiences in addition to in-class time. Enrollment by departmental permission only.

A-F Grading

Preferred effective term: Fall 2010

SPED 215 - Behavior Management

3 credits

This course teaches the direct application of the principles of behavior management in working with both individuals and groups. The use of positive applications for teaching appropriate behavior, increasing rates of academic learning, and the development of social skills is stressed. Work in selected settings is required in addition to in-class time. Concurrent with Elementary Education 250.

Prerequisites: SPED 102, 200, and admission to BCP-I.

Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.

Change description, prerequisites, co-requisites, and note to:

SPED 215 - Behavior Management

3 credits

This course teaches the direct application of the principles of behavior management in working with both individuals and groups. The use of positive applications for teaching appropriate behavior, increasing rates of academic learning, and the development of social skills is stressed. Work in selected settings is required in addition to in-class time.

Prerequisites: admission to BCP-I.

Co-requisites: to be taken concurrently with ELED 250.

Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time. Enrollment by departmental permission only.

A-F Grading

Preferred effective term: Fall 2010

SPED 400 - Secondary School, Community, and Family Interactions

3 credits

This course addresses the interconnectedness between the school, community, and family in planning to prepare students with mild interventions for transition into adult living.

Prerequisites: admission to BCP-I.

Co-requisites: to be taken concurrently with the All-Grade Block.

Note: all special education courses may require observation and participation in field experiences in addition to in-class time.

Change description, remove co-requisites, and change note to:

SPED 400 - Secondary School, Community, and Family Interactions

3 credits

This course addresses the interconnectedness between the school, community, and family in planning to prepare students with mild interventions for transition into adult living.

Prerequisites: admission to BCP-I.

Note: all special education courses may require observation and participation in field experiences in addition to in-class time. To be taken concurrently with the All-Grade Block.

A-F Grading

Preferred effective term: Summer I 2010

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Health, Safety, and Environmental Health Sciences

HLTH 315L - Industrial Hygiene I Laboratory

2 credits

Laboratory course for 315.

Change credits to:

HLTH 315L - Industrial Hygiene I Laboratory

1 credit

Laboratory course for 315.

A-F Grading

Preferred effective term: Fall 2010

HLTH 335L - Industrial Hygiene II Laboratory

2 credits

Laboratory course for 335.

Change credits to:

HLTH 335L - Industrial Hygiene II Laboratory

1 credit

Laboratory course for 335.

A-F Grading

Preferred effective term: Fall 2010

GRADUATE APPROVALS

NEW PROGRAMS

COLLEGE OF EDUCATION: Educational Leadership, Administration, and Foundations

Post-Master's Non-Degree License Program – Director of Curriculum and Instruction

Initial License – Director of Curriculum and Instruction (51 credits)

CIP Code: 130404 Major Code: _____

Brief Summary:

The Director of Curriculum and Instruction is a new proposed program for the College of Education. The program has been created to meet a need of the school districts in Indiana. The State has criteria for a license of Director of Curriculum and Instruction. At the present time, no college or university offers this licensure program. School leaders working at the district level of leadership in curriculum are required to have either this license or the Ed. S. degree in K-12 Administration, if the district desires to meet licensure accreditation standards. The program will meet the Indiana Department of Education requirements for the license. The program will be a Post-Master's Non-Degree Program. Creation of the program will allow Indiana State University to be the only university offering the licensure.

Student Learning:

Since 2002 and the beginning of No Child Left Behind (NCLB), schools and school districts have been expected to meet student achievement standards. School districts have to develop and revise curriculum, instruction, and assessment to attain academic achievement for all students. Curriculum and instruction are to follow proven successful research-based methods. Assessment data is used to determine the academic areas that must be improved. Many districts focus on curriculum and instruction, as well as assessment to meet the improvement goals. This has increased the number of individuals at the district level who have been employed to provide direction to teachers in terms of curriculum and instruction. These district level leaders must be able to analyze and disaggregate test data to determine curricular and instructional needs.

Job descriptions of Directors of Curriculum and Instruction from other states were reviewed to establish the skills required of the position. To determine what coursework best fit the skills, discussions were held with the Department of Curriculum and Media Technology (CIMT), the [Department of Communication Disorders and Counseling, School, and Educational Psychology](#) (CDCSEP), the Dean of the College of Education, and K-12 principals and superintendents.

The program was designed to model the other post-master's non-degree licensure programs, Director of Exceptional Needs and Director of Career and Technical Education that are advised by the ELAF department. The program includes some of the required coursework for the Principal's Preparation Program or the M. Ed. in School Administration and Supervision, as well as some of the coursework for the Ed. S. in K-12 Administration. Courses required for this degree as well as the Principal's Preparation Program or the M. Ed. In School Administration and Supervision include CIMT 610, EPSY 620, or COUN 620, ELAF 605, EPSY 621, ELAF 650, ELAF 655, ELAF 656, ELAF 683 and CIMT 660. Courses required for the degree and also required for the Ed. S. in K-12 Administration are ELAF 751, ELAF 754, ELAF 759, ELAF 790, and CIMT 770. Many of the students will be individuals who have been building –level administrators advancing to a district-level position. Some of these students will desire to advance to the Ed. S. degree to be eligible for a superintendent's license.

Proposed Catalog Copy:

Post-Master's Non-Degree License Program – Director of Curriculum and Instruction Initial License – Director of Curriculum and Instruction (51 credits)

CIP Code: 130404 Major Code: _____

The Director of Curriculum and Instruction Program fulfills, in part, the requirements for the Director of Curriculum and Instruction license prescribed by the Indiana Department of Education. The student must hold a valid Indiana teaching or administrative license, must present evidence of at least two years teaching experience, and must pass the state licensure examination. Students must have completed a master's degree with a minimum grade point average of 3.25.

Initial License – Director of Curriculum and Instruction (51 credits)

The student must complete either as a part of the master's program or as a part of the Non-Degree License Program, the following courses:

Educational Leadership, Administration, and Foundations 605- 3 credits, 650- 3 credits, 655- 3 credits, 656- 3 credits, 683- 3 credits, 751- 3 credits, 754- 3 credits, 759- 3 hrs, and 790- 3 credits; Curriculum, Instruction, and Media Technology 611- 3 credits or an approved equivalent assessment course, 660- 3 credits, 675- 3 credits, 770- 3 credits or an approved equivalent curriculum course, and 775- 3 credits or an approved equivalent curriculum course; Educational Psychology 621- 3 credits or an approved psychology equivalent; Curriculum, Instruction, and Media Technology 610 - 3 credits, Educational Psychology 620- 3 credits, or Counseling 620- 3credits, or an approved research methods equivalent; Special Education 601- 3 credits or 607- 3 credits, or an approved special education equivalent.

Preferred effective term: Fall 2010