NOTE: Changes to programs may require course changes, which must be processed electronically. Any questions should be directed to Associate Provost David Reinhold at 7-4564 or david.reinhold@wmich.edu

DEPARTMENT: CHP
PROPOSED EFFECTIVE FALL YEAR: 2020

PROPOSED IMPROVEMENTS: Academic Program Proposed Improvements
☐ New degree*
☐ New major*
☐ New curriculum*
☐ New concentration*
☐ New certificate*
☐ Admission requirements
☐ Graduation requirements
☐ Change in Title
☐ Transfer

☐ New minor*
☐ Deletion*
X Revised major
☐ Revised minor

X Other (explain**)
☐ Other: Incorporation of WMU Essential Studies Requirements replacing the current general education requirements

Title of degree, curriculum, major, minor, concentration, or certificate: B.S. in Graphic and Printing Science

Chair, Department Curriculum Committee: [Signature] Date 10/15/19

CHECKLIST FOR DEPARTMENT CHAIRS/DIRECTORS
☐ For new programs and other changes that have resource implications, the dean has been consulted.
☐ When appropriate, letters of support from department faculty are attached.
☐ When appropriate, letters of support from other departments in the same college are attached.
☐ When appropriate, letters of support from other college deans, whose programs/courses may be affected by the change, are attached.
☒ The proposal has been reviewed by HIGE for possible implications for international student enrollment.
☐ The proposal is consistent with the departmental assessment plan, and identifies measurable learning outcomes for assessment.
☐ Detailed resource plan is attached where appropriate.
☐ All questions attached have been completed and supporting documents are attached.
☐ The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

Chair/Director: [Signature] Date 10/15/19

CHECKLIST FOR COLLEGE CURRICULUM COMMITTEE
☐ The academic quality of the proposal and the faculty involved has been reviewed.
☐ Detailed resource plan is attached where appropriate.
☐ Consistency between the proposal and the relevant catalog language has been confirmed.
☐ The proposal has been reviewed for effect on students transferring from Michigan community colleges. Detailed information on transfer articulation must be included with undergraduate proposals.
☐ Consistency between the proposal and the College and department assessment plans has been confirmed.
☐ Consistency between the proposal and the College and department strategic plans has been confirmed.
☐ All questions attached have been completed and supporting documents are attached.
☐ The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

Revised Sept. 2018. All previous forms are obsolete and should not be used.
Chair, College Curriculum Committee:  

NOT FOR USE FOR CURRICULAR COURSE CHANGES  
REQUEST FOR PROGRAM IMPROVEMENTS

CHECKLIST FOR COLLEGE DEANS

☐ For new programs and proposed program deletions, the provost has been consulted.

☐ For new programs, letter of support from University Libraries Dean indicating library resource requirements have been met.

☐ When appropriate, letters of support from other college faculty and/or chairs are attached.

☐ When appropriate, letters of support from other college deans, whose programs/courses may be affected by the change, are attached.

☐ The proposal has been reviewed for implications for accreditation, certification, or licensure.

☐ Detailed resource plan is attached where appropriate.

☐ All questions attached have been completed and supporting documents are attached.

☐ The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

Dean:  

Date

FOR PROPOSALS REQUIRING REVIEW BY:
GSC/USC; EPGC, GRADUATE COLLEGE, and/or FACULTY SENATE EXECUTIVE BOARD

☐ Return to Dean

☐ Forward to:  
  
  Curriculum Manager:  
  
  *needs review by  
  
  Date:

☐ Approve ☐ Disapprove  
  
  Chair, GSC/USC:  
  
  Date

☐ Approve ☐ Disapprove  
  
  Chair, EPGC:  
  
  Date

☐ Approve ☐ Disapprove  
  
  Graduate College Dean:  
  
  Date:

☐ Approve ☐ Disapprove  
  
  Faculty Senate President:  
  
  Date

☐ Approve ☐ Disapprove  
  
  *needs review by  
  
  Provost:  
  
  Date

Revised Sept. 2018. All previous forms are obsolete and should not be used.
1. Explain briefly and clearly the proposed improvement:
   To update the curriculum replacing the current general education requirements with those of Western Essential Studies. ECON 2020 is removed the program requirements to keep the current total credit hours required for graduation. In addition, a student will take IEE 2610 and EDMM 1500 (suggested) or STAT 2160 and COM 1040 (suggested) to meet the WES requirements. The updated program content is mainly to to address WMU Essential Studies Program requirements.

2. Rationale. Give your reason(s) for the proposed improvement.
   Modification of the curriculum to meet the requirements of Western Essential Studies without changing the overall credit requirements of the program or the credit requirements of the different options in the program. Currently students meet their statistics requirement of the program either by IEE 2610 or by STAT 2160. These two courses meet the rWES requirements in two different categories. Hence, to fulfill the WES requirements, the student has to take the complimentary WES course. It is required to remove references to general education requirements and update with WMU Essential Studies Program requirements.

3. Effect on other colleges, departments, or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.
   No significant changes foreseen, as we are not increasing the overall credit load for the student in the "gen.ed." category.

4. Effect on your department’s programs. Show how the proposed change fits with other departmental offerings.
   No change is expected as we keep all the required courses as well as option credits in the program.

5. Alignment with college’s and department’s strategic plan, mission, and vision.
   Provides broad-based liberal arts education for civil engineering students and supports both ABET requirements and ASCE Body of Knowledge recommendations to ensure we graduate well-rounded civil engineers ready to lead challenges facing our society.

6. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students’ time.
   No effect on enrolled students as they will continue under the catalog year with which they entered. A deliberate transition will occur university-wide to address any issues that arise for current students. They will be taking the same number of program required courses outside of their WES courses and the overall credit hour requirements will not increase.

7. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?
   No change

8. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. If proposing a new program, include a letter and/or email of support from the university libraries affirming that the library resource issues have been reviewed. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)
   None. All revisions to the civil engineering program in response to the new WMU Essential Studies Program were coordinated across the college and university through the WMU Essential Studies Program design.

9. List the learning outcomes for the revised or proposed major, minor, or concentration. The department will use these outcomes for future assessments of the program.
   No change to program outcomes. They remain the same as before and they are:

Revised Sept. 2018. All previous forms are obsolete and should not be used.
a) an ability to apply knowledge of applied science, printing technology, business, and communication media
b) an ability to design and conduct experiments, as well as to analyze and interpret data
c) an ability to design a system, component, or process to meet desired needs
d) an ability to function on multidisciplinary teams
e) an ability to identify, formulate, and solve technical and applied science problems
f) an understanding of professional and ethical responsibility

g) an ability to communicate effectively
h) the broad education necessary to understand the impact of printing solutions in a global, economic, environmental, and societal context
i) a recognition of the need for, and an ability to engage in life-long learning
j) a knowledge of contemporary issues
k) an ability to use the techniques, skills, and modern professional tools necessary for professional practice

10. Describe how this change is a response to assessment outcomes that are part of a department or college assessment plan or informal assessment activities.

The changes were in response to a university-wide revised general education program.

11. (Undergraduate proposals only) Describe in detail how this change affects transfer articulation for Michigan community colleges. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section.

This aspect is being addressed by the Director of the WMU Essential Studies Program, the Associate Provost for Assessment and Undergraduate Studies, and the advising staff.

12. Please offer both “Current Catalog Language” and “Proposed Catalog Language” if there is to be a change in the catalog description for a given program. For the “current” language, please copy and paste relevant language from the most current catalog and for the “proposed” language, please share the exact proposed new catalog language. As possible, bold or otherwise note the key changes in the new proposed catalog language.

Attached.

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Graphic and Printing Science

Return to: Departments and Programs
Accredited by ACCGC

Program Educational Objectives: Our graduates are expected within a few years of graduation to attain the following career growth, professional development, innovation, and service:

Career Growth: as measured by metrics such as achieving proficiency in current position, increasing responsibilities, recognition, progression and/or job advancement.

Professional Development: as measured by metrics such as pursuing additional educational activities, professing leadership effectiveness, staying current with evolving technologies and/or demonstrating initiative.

Service: as measured by metrics such as involvement in their communities, professional societies, and/or human innovation and entrepreneurship: as measured by metrics such as the development of new processes, devices, founding a business.

Requirements
Candidates for the Bachelor of Science in Graphic and Printing Science must satisfy all of the requirements or of the three emphasis areas (Business, multimedia or packaging). This includes 50 hours in Graphic and Print in a selected area of emphasis and 37 hours in General Education.

The requirement of departmental prefixed prerequisite will not be fulfilled with a grade less than “C”. Request policy must follow the departmental appeal policy (available in the department office). If an exception is granted, the less than “C” grade be replaced within two regular semesters.

No more than two grades of “D” or “DC” may be presented for graduation.

At least two of the General Education courses must be at the 3000/4000 level.

Baccalaureate-Level Writing Requirement

Students who have chosen the Graphic and Printing Science major will satisfy the Baccalaureate-Level Writing Requirement successfully completing GPS 4850: Research Design.

Graphic and Printing Science Core (50 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHP 3100</td>
<td>Work Experience/Co-op Programs</td>
<td>1 hour</td>
</tr>
<tr>
<td>PAPR 1000</td>
<td>Introduction to Pulp and Paper Manufacture</td>
<td>3 hours</td>
</tr>
<tr>
<td>GPS 1500</td>
<td>Introduction to Graphic and Printing Science</td>
<td>4 hours</td>
</tr>
<tr>
<td>GPS 1570</td>
<td>Imaging Systems</td>
<td>3 hours</td>
</tr>
<tr>
<td>GPS 2150</td>
<td>Introduction to Ink</td>
<td>4 hours</td>
</tr>
<tr>
<td>GPS 2510</td>
<td>Multimedia Publication and Design</td>
<td>3 hours</td>
</tr>
<tr>
<td>GPS 2570</td>
<td>Computer Graphics and Prepress</td>
<td>3 hours</td>
</tr>
<tr>
<td>GPS 3500</td>
<td>Offset Lithography</td>
<td>4 hours</td>
</tr>
<tr>
<td>GPS 3570</td>
<td>Color Management</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
GPS 3580 - Flexography  **Credits:** 4 hours  
GPS 3590 - Rotogravure  **Credits:** 4 hours  
GPS 4400 - Seminar  **Credits:** 1 hour  
GPS 4580 - Digital Printing and Workflow  **Credits:** 3 hours  
GPS 4620 - Print Estimating  **Credits:** 4 hours  
GPS 4630 - Finishing and Converting  **Credits:** 3 hours  
GPS 4850 - Research Design  **Credits:** 3 hours

**General Education Requirements (37 hours must be met)**

**AREA I: Fine Arts**  **Credits:** 3 or 4 hours  
**AREA II: Humanities**  **Credits:** 3 or 4 hours  
**AREA III: The United States: Cultures and Issues**  **Credits:** 3 or 4 hours  
**AREA IV: Other Cultures and Civilizations**  **Credits:** 3 or 4 hours  
**AREA V: Social and Behavioral Sciences (ECON 2010 and ECON 2020)**  **Credits:** 6 hours  
**AREA VI: Natural Science with Laboratory (CHEM 1100, CHEM 1110)**  **Credits:** 4 hours  
**AREA VII: Natural Science and Technology**  **Credits:** 3 hours  
**AREA VIII: Health and Well-Being**  **Credits:** 2 hours

**Proficiency 1: College-Level Writing (IEE 1020)**  **Credits:** 3 hours  
**Proficiency 3: College-Level Mathematics (MATH 1180)**  **Credits:** 4 hours  
**Proficiency 4: Develop a Proficiency (STAT 2160 or IME 2610)**  **Credits:** 3 hours

**Areas of Emphasis**

**Emphasis in Business (37 hours minimum)**

**Required Courses (18 hours)**

- **BUS 1750 - Business Enterprise**  **Credits:** 3 hours  
- **CIS 2700 - Business-Driven Information Technology**  **Credits:** 3 hours  
- **ACTY 2100 - Principles of Accounting I**  **Credits:** 3 hours  
- **MGMT 2500 - Organizational Behavior**  **Credits:** 3 hours  
- **MKTG 2500 - Marketing Principles**  **Credits:** 3 hours  
- **FIN 3200 - Business Finance**  **Credits:** 3 hours

**Elective Courses (19 hours)**

- **CHP 3100 - Work Experience/Co-op**  **Credits:** 1 hour  
- **GPS 4570 - Advanced Multimedia**  **Credits:** 3 hours  
- **GPS 5100 - Printability Analysis**  **Credits:** 3 hours  
- **PAPR 2420 - Coating**  **Credits:** 4 hours  
- **PAPR 4860 - Independent Research**  **Credits:** 3 hours  
- **PAPR 4990 - Independent Studies**  **Credits:** 1 to 6 hours  
- **MKTG 2520 - Human Resource Management**  **Credits:** 3 hours  
- **MKTG 3710 - Marketing Research**  **Credits:** 3 hours  
- **MKTG 3740 - Advertising and Promotion**  **Credits:** 3 hours  
- **LAW 3500 - Computer Law**  **Credits:** 3 hours
LAW 3800 - Legal Environment Credits: 3 hours
EDMM 1500 - Introduction to Manufacturing Credits: 3 hours
EDMM 2500 - Plastics Properties and Processing Credits: 3 hours
EDMM 3050 - Work Analysis Credits: 3 hours
EDMM 3260 - Operations Planning and Control Credits: 3 hours
EDMM 3280 - Quality Assurance and Control Credits: 3 hours
MATH 1220 - Calculus I Credits: 4 hours
OR
MATH 1700 - Calculus I, Science and Engineering Credits: 4 hours
MATH 2000 - Calculus with Applications Credits: 4 hours
MATH 1230 - Calculus II Credits: 4 hours
OR
MATH 1710 - Calculus II, Science and Engineering Credits: 4 hours

**Emphasis in Multimedia (37 hours minimum)**

**Required Courses (18 hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 1000</td>
<td>Communication and Community Engagement</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 1040</td>
<td>Public Speaking</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 2000</td>
<td>Human Communication Theory</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 2400</td>
<td>Introduction to Media and Telecommunications</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 2410</td>
<td>Film Communication</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 2560</td>
<td>Digital Media: Planning and Operations</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

**Elective Courses (19 hours)**

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHP 3100</td>
<td>Work Experience/Co-op</td>
<td>1 hour</td>
</tr>
<tr>
<td>GPS 4570</td>
<td>Advanced Multimedia</td>
<td>3 hours</td>
</tr>
<tr>
<td>GPS 5100</td>
<td>Printability Analysis</td>
<td>3 hours</td>
</tr>
<tr>
<td>PAPR 2420</td>
<td>Coating</td>
<td>4 hours</td>
</tr>
<tr>
<td>PAPR 4860</td>
<td>Independent Research</td>
<td>3 hours</td>
</tr>
<tr>
<td>PAPR 4990</td>
<td>Independent Studies</td>
<td>1 to 6 hours</td>
</tr>
<tr>
<td>COM 1700</td>
<td>Interpersonal Communication</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 2570</td>
<td>Introduction to Audio Production</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3070</td>
<td>Freedom of Expression</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3410</td>
<td>Film Modes and Genres</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3420</td>
<td>The International Film Industry</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3430</td>
<td>American Film History</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 3540</td>
<td>Web Design and Digital Communication</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 4410</td>
<td>Documentary in Film and Television</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 4430</td>
<td>Media and Social Change</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 4440</td>
<td>Mass Communication, News, and Public Affairs</td>
<td>3 hours</td>
</tr>
<tr>
<td>COM 4450</td>
<td>Media Criticism</td>
<td>3 hours</td>
</tr>
<tr>
<td>MATH 1220</td>
<td>Calculus I</td>
<td>4 hours</td>
</tr>
</tbody>
</table>
OR
| MATH 1700   | Calculus I, Science and Engineering               | 4 hours |
| MATH 2000   | Calculus with Applications                        | 4 hours |
MATH 1230 - Calculus II Credits: 4 hours
OR
MATH 1710 - Calculus II, Science and Engineering Credits: 4 hours
EDMM 3260 - Operations Planning and Control Credits: 3 hours
Emphasis in Packaging (37 hours minimum)

Required Courses (18 hours)

PAPR 2040 - Stock Preparation and Papermaking Credits: 4 hours
PAPR 2420 - Coating Credits: 4 hours
MKTG 2900 - Introduction to Food and CPG Industries Credits: 3 hours
EDMM 1420 - Engineering Graphics Credits: 3 hours

Elective Courses (19 hours)

CHP 3100 - Work Experience/Co-op Credits: 1 hour
GPS 4570 - Advanced Multimedia Credits: 3 hours
GPS 5100 - Printability Analysis Credits: 3 hours
PAPR 2550 - Paper Physics Fundamentals Credits: 4 hours
PAPR 4860 - Independent Research Credits: 3 hours
PAPR 4990 - Independent Studies Credits: 1 to 6 hours
CHEM 1120 - General Chemistry II Credits: 3 hours
CHEM 1130 - General Chemistry Laboratory II Credits: 1 hour
EDMM 1500 - Introduction to Manufacturing Credits: 3 hours
EDMM 2460 - CAD - Solid Modeling Credits: 3 hours
EDMM 2500 - Plastics Properties and Processing Credits: 3 hours
EDMM 3260 - Operations Planning and Control Credits: 3 hours
MATH 1220 - Calculus I Credits: 4 hours
OR
MATH 1700 - Calculus I, Science and Engineering Credits: 4 hours
MATH 1230 - Calculus II Credits: 4 hours
OR
MATH 1710 - Calculus II, Science and Engineering Credits: 4 hours
PROPOSED CATALOG COPY

Graphic and Printing Science

Return to: Departments and Programs
Accredited by ACCGC

Program Educational Objectives: Our graduates are expected within a few years of graduation to attain the following in the areas of career growth, professional development, innovation, and service:

Career Growth: as measured by metrics such as achieving proficiency in current position, increasing responsibility, diversity of job functions, recognition, progression and/or job advancement.

Professional Development: as measured by metrics such as pursuing additional educational activities, professional certifications, leadership effectiveness, staying current with evolving technologies and/or demonstrating initiative.

Service: as measured by metrics such as involvement in their communities, professional societies, and/or humanitarian endeavors.

Innovation and entrepreneurship: as measured by metrics such as the development of new processes, devices, methods, patents, and/or founding a business.

Requirements
Candidates for the Bachelor of Science in Graphic and Printing Science must satisfy all of the requirements of 124 hours and select one of the three emphasis areas (Business, multimedia or packaging). This includes 50 hours in Graphic and Printing Science core, 37 hours in a selected area of emphasis and WIS requirements.

The requirement of departmental prefixed prerequisite will not be fulfilled with a grade less than "C". Requests for exceptions to this policy must follow the departmental appeal policy (available in the department office). If an exception is granted, the policy requires that the less than "C" grade be replaced within two regular semesters.

No more than two grades of "D" or "DC" may be presented for graduation.

Baccalaureate-Level Writing Requirement

Students who have chosen the Graphic and Printing Science major will satisfy the Baccalaureate-Level Writing Requirement by successfully completing GPS 4850: Research Design.

Graphic and Printing Science Core (50 hours)

CHP 3100 - Work Experience/Co-op Credits: 1 hour
PAPR 1010 - Introduction to Pulp and Paper Manufacture Credits: 3 hours
GPS 1500 - Introduction to Graphic and Printing Science Credits: 4 hours

GPS 1570 - Imaging Systems Credits: 3 hours
GPS 2150 - Introduction to Ink Credits: 4 hours
GPS 2510 - Multimedia Publication and Design Credits: 3 hours
GPS 2570 - Computer Graphics and Prepress Credits: 3 hours
GPS 3500 - Offset Lithography Credits: 4 hours
GPS 3570 - Color Management Credits: 3 hours
GPS 3580 - Flexography Credits: 4 hours
GPS 3590 - Rotogravure Credits: 4 hours
GPS 4400 - Seminar Credits: 1 hour
GPS 4580 - Digital Printing and Workflow Credits: 3 hours

Revised Sept. 2018. All previous forms are obsolete and should not be used.
GPS 4620 - Print Estimating Credits: 4 hours
GPS 4630 - Finishing and Converting Credits: 3 hours
GPS 4850 - Research Design Credits: 3 hours

WMU Essential Studies Program Requirements

Students who have chosen the Graphic and Printing Science curriculum will satisfy the WMU Essential Studies Program Requirements as outlined within the course listings below. To satisfy these requirements students take courses in twelve (12) categories. Six (6) of the courses are designated within the program requirements and six (6) are free electives which students choose from a list of courses in the corresponding course category. Students will meet the planetary sustainability outcome in GPS 4850: Senior Project and must select a course that satisfies the Diversity and Inclusion outcome when choosing a course in the other six (6) categories.

- IEE 1020 - Technical Communication Credits: 3 hours
  (Satisfies WMU Essential Studies Level 1: Writing Course Requirement)
- MATH 1180 - Pre Calculus Mathematics Credits: 4 hours
  (Satisfies WMU Essential Studies Level 1: Quantitative Literacy Course Requirement)
- WMU Essential Studies Level 1: Inquiry and Engagement Course Elective Credits: 3 hours
- ECON 2101 - Principles of Microeconomics Credits: 3 hours (Program Requirement)
  (Satisfies WMU Essential Studies Level 1: Quantitative Literacy Course Requirement)
- ECON 2102 - Principles of Macroeconomics Credits: 3 hours (Program Requirement)
  (Satisfies WMU Essential Studies Level 1: Quantitative Literacy Course Requirement)
- WMU Essential Studies Level 2: Artistic Theory and Practice Course Elective Credits: 3 hours
- WMU Essential Studies Level 2: Societies and Cultures Course Elective Credits: 3 hours
- WMU Essential Studies Level 2: World Language and Cultures Course Elective Credits: 3 hours
- WMU Essential Studies Level 2: Personal Wellness Course Elective Credits: 3 hours
- WMU Essential Studies Level 3: Global Perspectives Course Elective Credits: 3 hours

- IEE 2610 - Engineering Statistics Credits: 3 hours
  (Satisfies WMU Essential Studies Level 1: Oral and Digital Communication Course Requirement)

AND

WMU Essential Studies Level 2: Science and Technology Course Equivalent Elective Credits: 3 hours

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OR

STAT 2160 - Business Statistics 3 hours
(Satisfies WMU Essential Studies Level 2: Science and Technology Course Requirement)

AND

WMU Essential Studies Level 1: Quantitative Literacy Course Requirement

Areas of Emphasis

Emphasis in Business (37 hours minimum)

Required Courses (18 hours)

BUS 1750 - Business Enterprise Credits: 3 hours
CIS 2700 - Business-Driven Information Technology Credits: 3 hours
ACTY 2100 - Principles of Accounting I Credits: 3 hours
MGMT 2500 - Organizational Behavior Credits: 3 hours
MKTG 2500 - Marketing Principles Credits: 3 hours
FIN 3200 - Business Finance Credits: 3 hours
Elective Courses (19 hours)

CHP 3100 - Work Experience/Co-op Credits: 1 hour
GPS 4570 - Advanced Multimedia Credits: 3 hours
GPS 5100 - Printability Analysis Credits: 3 hours
PAPR 4220 - Content Credits: 4 hours
PAPR 4860 - Independent Research Credits: 3 hours
PAPR 4990 - Independent Studies Credits: 1 to 6 hours
MGMT 2920 - Human Resource Management Credits: 3 hours
MKTG 3710 - Marketing Research Credits: 3 hours
MKTG 3740 - Advertising and Promotion Credits: 3 hours
LAW 3500 - Computer Law Credits: 3 hours
LAW 3800 - Legal Environment Credits: 3 hours
EDMM 1500 - Introduction to Manufacturing Credits: 3 hours
EDMM 2500 - Plastics Properties and Processing Credits: 3 hours
EDMM 3050 - Work Analysis Credits: 3 hours
EDMM 3260 - Operations Planning and Control Credits: 3 hours
EDMM 3290 - Quality Assurance and Control Credits: 3 hours
MATH 1220 - Calculus I Credits: 4 hours
OR
MATH 1700 - Calculus I, Science and Engineering Credits: 4 hours
MATH 2000 - Calculus with Applications Credits: 4 hours
MATH 1230 - Calculus II Credits: 4 hours
OR
MATH 1710 - Calculus II, Science and Engineering Credits: 4 hours

Emphasis in Multimedia (37 hours minimum)

Required Courses (18 hours)

Revised Sept. 2018. All previous forms are obsolete and should not be used.