

**MEMORANDUM TO:** Ogden College of Science and Engineering Curriculum Committee

Dr. Taha Alyousef  
Dr. Doug Harper  
Dr. Michelle Jackson  
Dr. Pat Kambesis  
Dr. Phil Lienesch

Dr. Jeremy Maddox  
Dr. Andy Mienaltowski  
Dr. Les Pesterfield  
Dr. Todd Willian

**FROM:** Stuart Burris, Chair

**SUBJECT:** Agenda for Thursday, April 30, 2020 at 4:00 p.m.

**A. OLD BUSINESS:**

- I. Consideration of the minutes of the March 26, 2020 meeting.

**B. NEW BUSINESS:**

<b>Type of item</b>	<b>Description of Item &amp; Contact Information</b>
Informational	<b>Proposal to Revise Course Prerequisites/Corequisites</b> AMS 343, Automated Systems AMS 398, Internship I <b>Proposal to Suspend a Course</b> AMS 311, Digital Systems Simulation AMS 332, Solar Technology Applications AMS 340, Manufacturing Operations I AMS 341, Manufacturing Operations II AMS 381, Food Quality Assurance AMS 410, Industrial Science Problems AMS 443, Food Packaging AMS 452, Production Woodworking CM 227, Applied Statistics CM 337, Applied Strength of Materials CM 339, Applied Strength of Materials Lab CM 400, Construction Administration CM 426, Construction Law CM 447, Applied Structural Design CM 463, Construction Estimating & Bidding II EE 175, University Experience – Electrical Engineering EE 400, Electrical Engineering Design IV EE 401, EE Design Project EE 465, Robotic Design <b>Proposal to Delete a Program</b> Ref. 405, Floodplain Management Minor
Consent	<b>Proposal to Revise a Course Title</b> AMS 310, Ergonomics & Safety, 3 hrs.

	Contact: Bryan Reaka, <a href="mailto:bryan.reaka@wku.edu">bryan.reaka@wku.edu</a> , x7032
Consent	<b>Proposal to Revise Course Prerequisites</b> AMS 356, Systems Design & Operation, 3 hrs. Contact: Bryan Reaka, <a href="mailto:bryan.reaka@wku.edu">bryan.reaka@wku.edu</a> , x7032
Consent	<b>Proposal to Revise Course Prerequisites</b> AMS 490E, Senior Research for MET, 3 hrs. Contact: Bryan Reaka, <a href="mailto:bryan.reaka@wku.edu">bryan.reaka@wku.edu</a> , x7032
Action	<b>Proposal to Revise a Program</b> Ref. 5006, Manufacturing Engineering Technology, 61 hrs. Contact: Bryan Reaka, <a href="mailto:bryan.reaka@wku.edu">bryan.reaka@wku.edu</a> , x7032

### C. OTHER BUSINESS

- I. New forms to include market & financial analysis
- II. Election of department representatives for the Ogden College Curriculum Committee

**Members Present:**

Dr. Taha Alyousef  
Dr. Michelle Jackson  
Dr. Pat Kambesis  
Dr. Phil Lienesch  
Dr. Jeremy Maddox  
Dr. Andy Mienaltowski

Dr. Les Pesterfield  
Dr. Todd Willian  
Dr. Richard Gelderman for Doug Harper  
Guest: Dr. Bashar Haddad  
Guest: Dr. Sigrid Jacobshagen

**FROM:** Stuart Burris, Chair

The meeting was called to order at 4:00pm.

**OLD BUSINESS:**

Willian/Pesterfield moved to approve of the minutes of the February 27, 2020 meeting. Motion passed.

**NEW BUSINESS:**

**Consent Agenda**

Jackson/Willian moved to approve the consent agenda. The consent agenda was approved unanimously.

**Action Agenda**

**Mathematics Department**

Willian/Jackson moved to approve the Proposal to Revise a Program: Ref. 528, Mathematics, Extended Major. Motion passed unanimously with a friendly amendment.

**School of Engineering & Applied Sciences**

Mienaltowski/Pesterfield moved to approve the Proposal to Revise a Program: Ref. 533, Construction Management. Motion passed unanimously with a friendly amendment.

**Biology Department**

Kambesis/Lienesch moved to approve the Proposal to Revise a Program: Ref. 738, Molecular Biotechnology. Motion passed on a 6 to 3 vote.

**OTHER BUSINESS:**

None.

**Ogden College  
School of Engineering and Applied Sciences (SEAS)  
Proposal to Revise Course Prerequisites  
(Consent Item)**

Contact Person: Bryan Reaka, [bryan.reaka@wku.edu](mailto:bryan.reaka@wku.edu), 270.745.7032

- 1. Identification of course:**
  - 1.1 Course prefix (subject area) and number: AMS 343
  - 1.2 Course title: Automated Systems
  
- 2. Current prerequisites:** AMS 120
  
- 3. Proposed prerequisites:** AMS 120 or EE 180 or EE 210
  
- 4. Rationale for the revision of prerequisites:** The Manufacturing Engineering Program (MET) is adding the options of EE 180 or EE210 to count for the course AMS 120 in the MET major. This change in prerequisite will allow the students who change from EE to MET as well as the students who would like to take AMS 343 as a technical Elective within their EE degree to not have difficulty registering for the AMS 343 course, thus reducing the paperwork/ administrative duties within the advising process.
  
- 5. Effect on completion of major/minor sequence:** NONE
  
- 6. Proposed term for implementation:** As soon as possible
  
- 7. Dates of prior committee approvals:**

School of Engineering and Applied Sciences (SEAS)  
Ogden College Dean's Office  
Provost

**4-10-2020**

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Proposal Date:3/5/2020

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Revise Course Prerequisites/Corequisites  
(Consent Item)**

Contact Person: Stacy Wilson, [stacy.wilson@wku.edu](mailto:stacy.wilson@wku.edu), 56394

- 1. Identification of course:**
  - 1.1 Course prefix (subject area) and number: AMS 398
  - 1.2 Course title: Internship I
- 2. Current prerequisites/corequisites/special requirements:** 15 semester hours in Industrial Sciences or junior standing with permission of instructor.
- 3. Proposed prerequisites/corequisites/special requirements:** Junior standing with permission of instructor
- 4. Rationale for the revision of prerequisites/corequisites/special requirements:** The Industrial Sciences program no longer exists.
- 5. Effect on completion of major/minor sequence:** none
- 6. Proposed term for implementation:** as soon as possible
- 7. Dates of prior committee approvals:**

School of Engineering and Applied Sciences  
Ogden College Dean's Office  
Provost

4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Science  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 311
- 1.2 Course title: Digital Systems Simulation

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

4/10/2020

Ogden College Dean's Office

Provost

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 332
- 1.2 Course title: Solar Technology Applications

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 340
- 1.2 Course title: Manufacturing Operations I

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 341
- 1.2 Course title: Manufacturing Operations II

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 381
- 1.2 Course title: Food Quality Assurance

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 410
- 1.2 Course title: Industrial Science Problems

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 443
- 1.2 Course title: Food Packaging

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 452
- 1.2 Course title: Production Woodworking

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences  
Ogden College Dean's Office  
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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 227
- 1.2 Course title: Applied Statics

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 337
- 1.2 Course title: Applied Strength of Materials

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 339
- 1.2 Course title: Applied Strength of Materials Lab

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 400
- 1.2 Course title: Construction Administration

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 426
- 1.2 Course title: Construction Law

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

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4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 447
- 1.2 Course title: Applied Structural Design

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 10/8/19

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy S. Wilson, stacy.wilson@wku.edu, 270-745-6394

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: CM 463
- 1.2 Course title: Construction Estimating and Bidding II

**2. Rationale for the course suspension:**

Course has not been offered in several years

**3. Effect of course suspension on programs or other departments, if known:**

NONE

**4. Proposed term for implementation:**

FALL 2020

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 3/5/2020

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy Wilson, [stacy.wilson@wku.edu](mailto:stacy.wilson@wku.edu), 56394

**1. Identification of course:**

1.1 Current course prefix (subject area) and number: EE 175

1.2 Course title: University Experience – Electrical Engineering

**2. Rationale for the course suspension:** This course was created as a freshmen seminar experience.

However, the course is no longer required by the electrical engineering program and has not been taught in several years. There are no plans to teach the course in the future.

**3. Effect of course suspension on programs or other departments, if known:** None

**4. Proposed term for implementation:** as soon as possible

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 3/5/2020

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy Wilson, [stacy.wilson@wku.edu](mailto:stacy.wilson@wku.edu), 56394

**1. Identification of course:**

1.1 Current course prefix (subject area) and number: EE 400

1.2 Course title: Electrical Engineering Design IV

**2. Rationale for the course suspension:** Several years ago, new multidisciplinary engineering capstone sequence, ENGR 490 and 491, were created. Since that time, all engineering senior students have taken the new sequence and there are no plans to teach the EE 400 and 401 in the future.

**3. Effect of course suspension on programs or other departments, if known:** None

**4. Proposed term for implementation:** as soon as possible

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 3/5/2020

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy Wilson, [stacy.wilson@wku.edu](mailto:stacy.wilson@wku.edu), 56394

**1. Identification of course:**

1.1 Current course prefix (subject area) and number: EE 401

1.2 Course title: EE Design Project

**2. Rationale for the course suspension:** Several years ago, new multidisciplinary engineering capstone sequence, ENGR 490 and 491, were created. Since that time, all engineering senior students have taken the new sequence and there are no plans to teach the EE 400 and 401 in the future.

**3. Effect of course suspension on programs or other departments, if known:** None

**4. Proposed term for implementation:** as soon as possible

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 3/5/2020

**Ogden College  
School of Engineering & Applied Sciences  
Proposal to Suspend a Course  
(Consent Item)**

Contact Person: Stacy Wilson, [stacy.wilson@wku.edu](mailto:stacy.wilson@wku.edu), 56394

**1. Identification of course:**

1.1 Current course prefix (subject area) and number: EE 465

1.2 Course title: Robotic Design

**2. Rationale for the course suspension:** This course was created to provide credit for students involved in an extracurricular activity and does not satisfy any requirements for the major. There are no plans to teach the course in the future.

**3. Effect of course suspension on programs or other departments, if known:** None

**4. Proposed term for implementation:** as soon as possible

**5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

Ogden College Dean's Office

Provost

4/10/2020

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Proposal Date: 3/30/2020

**Ogden College of Science and Engineering  
School of Engineering and Applied Sciences  
Proposal to Delete a Program  
(Consent Item)**

Contact Person: Stacy Wilson, stacy.wilson@wku.edu

- 1. Identification of program:**
  - 1.1 Program reference number: 405
  - 1.2 Program title: Floodplain Management Minor
  - 1.3 Credit hours: 26
  
- 2. Rationale for the program deletion:** CAPE process recommended the minor be suspended.
  
- 3. Effect on current students or other departments, if known:** students will have to enroll in certificate rather than minor
  
- 4. Proposed term for implementation:** ASAP
  
- 5. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

3/30/2020

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

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Proposal Date: 4-8-2020

**Ogden College  
School of Engineering and Applied Sciences  
Proposal to Revise Course Title  
(Consent Item)**

Contact Person: Bryan Reaka, [bryan.reaka@wku.edu](mailto:bryan.reaka@wku.edu), 270.745.7032

**1. Identification of course:**

- 1.1 Current course prefix (subject area) and number: AMS 310
- 1.2 Course title: Ergonomics and Safety
- 1.3 Credit Hours: 3

**2. Proposed course title:** Safety and Ergonomics

**3. Proposed abbreviated course title:** Safety and Ergonomics  
(maximum of 30 characters/spaces)

**4. Rationale for the revision of course title:** Although the topics of Ergonomics and Safety are closely related the emphasis within this course is more towards safety in the workplace. Ergonomics is being taught in the course, but at a lesser level compared to other topics. The word safety is a key aspect of almost any workplace in this current day so having this word come first in the title better reflects the majority of the course as well as the interests of the industries hiring students.

**5. Proposed term for implementation:** As soon as Available/ Spring 2021

**6. Dates of prior committee approvals:**

School of Engineering and Applied Sciences

4-10-2020

Ogden College Curriculum Committee

Undergraduate Curriculum Committee

University Senate

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University Undergraduate Curriculum Proposal Checklist

Please complete the following checklist to ensure your proposal will proceed smoothly and efficiently. Include the checklist as a cover sheet with your proposal. Proposals without the checklist will be returned to the proponent.

- For new or revised programs, courses, or course descriptions, what departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisites or prerequisites for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

AMS 310

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

NONE: SEAS Internal Discussion took place 10.15.2019

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

Stacy Wilson

Digitally signed by Stacy Wilson  
Date: 2020.04.27 11:35:12  
+05'00'

Department Head

Dean or Designee

Date

Date

**Ogden College  
School of Engineering and Applied Sciences (SEAS)  
Proposal to Revise Course Prerequisites  
(Consent Item)**

Contact Person: Bryan Reaka, [bryan.reaka@wku.edu](mailto:bryan.reaka@wku.edu), 270.745.7032

- 1. Identification of course:**
  - 1.1 Course prefix (subject area) and number: AMS 356
  - 1.2 Course title: Systems Design and Operation
  
- 2. Current prerequisites:** AMS 271
  
- 3. Proposed prerequisites:** AMS 271 or ECON 206 or MATH 183 or STAT 301
  
- 4. Rationale for the revision of prerequisites:** The Manufacturing Engineering Program (MET) is adding the options of ECON 206 or MATH 183 or STAT 301 to count for the course AMS 271 in the MET major. This change in prerequisite will allow the students who change from Engineering, or who are pursuing a minor in Business Administration to not have difficulty registering for the AMS 356 course, thus reducing the paperwork/ administrative duties within the advising process.
  
- 5. Effect on completion of major/minor sequence:** NONE
  
- 6. Proposed term for implementation:** As soon as possible
  
- 7. Dates of prior committee approvals:**

School of Engineering and Applied Sciences (SEAS)  
Ogden College Curriculum Committee  
Undergraduate Curriculum Committee  
University Senate

**4-10-2020**

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### University Undergraduate Curriculum Proposal Checklist

Please complete the following checklist to ensure your proposal will proceed smoothly and efficiently. Include the checklist as a cover sheet with your proposal. Proposals without the checklist will be returned to the proponent.

- For new or revised programs, courses, or course descriptions, what departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

AMS 358 Lebedinsky, Alexander <alex.lebedinsky@wku.edu>Economics contacted.

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

NONE: Economics contacted 02.05.2020. Math contacted 02.04.2020

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

**Stacy Wilson** Digitally signed by Stacy Wilson  
Date: 2020.04.27 11:52:01  
-0500

Department Head

Dean or Designee

Date

Date

Ogden College  
School of Engineering and Applied Sciences (SEAS)  
Proposal to Revise Course Prerequisites  
(Consent Item)

Contact Person: Bryan Reaka, [bryan.reaka@wku.edu](mailto:bryan.reaka@wku.edu), 270.745.7032

- 1. **Identification of course:**
  - 1.1 Course prefix (subject area) and number: AMS 490E
  - 1.2 Course title: Senior Research for MET
  
- 2. **Current prerequisites/ corequisites:** AMS 356 [Min Grade: C] and AMS 390 [Min Grade: C] and AMS 370 [Min Grade: C] and AMS 394 (may be taken concurrently)
  
- 3. **Proposed prerequisites/ corequisites:** (AMS 356 [Min Grade: C] or MGT 314 [Min Grade: C]) and AMS 390 [Min Grade: C] and AMS 370 [Min Grade: C] and AMS 394 (may be taken concurrently)
  
- 4. **Rationale for the revision of prerequisites:** The Manufacturing Engineering Program (MET) is adding the options of MGT 314 to count for the course AMS 356 in the MET major. This change in prerequisite will allow the students who are pursuing a minor in Business Administration to not have difficulty registering for the course, thus reducing the paperwork/ administrative duties within the advising process.
  
- 5. **Effect on completion of major/minor sequence:** This may potentially shorten the time to graduation for some students since MGT 314 is offered every semester and AMS 356 is only offered in a once a year rotation at present.
  
- 6. **Proposed term for implementation:** As soon as possible
  
- 7. **Dates of prior committee approvals:**

School of Engineering and Applied Sciences (SEAS)	<u>4-10-2020</u>
Ogden College Curriculum Committee	_____
Undergraduate Curriculum Committee	_____
University Senate	_____

University Undergraduate Curriculum Proposal Checklist

Please complete the following checklist to ensure your proposal will proceed smoothly and efficiently. Include the checklist as a cover sheet with your proposal. Proposals without the checklist will be returned to the proponent.

- For new or revised programs, courses, or course descriptions, what departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

AMS 490E; Bob Hatfield <drbobhatfield@gmail.com> Management was contacted on

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

NONE: The department chair of Management was contacted on 02.20.2020.

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

**Stacy Wilson** Digitally signed by Stacy Wilson  
Date: 2020.04.27 11:52:07  
+05'00'

Department Head

Dean or Designee

Date

Date

**Proposal to Revise a Program:** Manufacturing Engineering Technology (#5006)  
**Ogden College**  
**Department/Unit:** School of Engineering and Applied Sciences

### **Section 1: Proponent Contact Information**

- 1.1 Bryan Reaka, Associate Professor
- 1.2 Email address: bryan.reaka@wku.edu
- 1.3 Phone # 270.745.7032

### **Section 2: Program Information**

- 2.1 Current Program reference number: 5006
- 2.2 Current Program title: Manufacturing Engineering Technology
- 2.3 Current total number of credits required in the program: 61

### **Section 3: Proposed program revisions and rationales**

- 3.1 Add options of EE180 and EE 210 as well as keep the AMS 120 for Basic electricity. All of these courses within the school of Engineering and Applied Sciences cover basics of electrical circuitry. This addition of options is meant to reduce repetitive paperwork since these Engineering courses cover the basic components needed for the AMS prefix course as well as deeper topics. This will allow students who transfer from an Engineering degree path to the Manufacturing Engineering Technology (MET) Degree to use coursework they have previously obtained without the need for the exception form process thus reducing paperwork.
- 3.2 Add options of ME180 as well as keep the AMS 163 or 205 for Computer Aided Drafting (CAD). All of these courses within the School of Engineering and Applied Sciences cover basics of CAD. This addition of options is meant to reduce repetitive paperwork since these Engineering courses cover the basic components needed for the AMS prefix course as well as deeper topics. This will allow students who transfer from an Engineering degree path to the Manufacturing Engineering Technology (MET) Degree to use coursework they have previously obtained without the need for the exception form process thus reducing paperwork.
- 3.3 Add options of ECON 206, MATH 183 and STAT 301 as well as keep the AMS 271 for Statistics. All of these courses cover basics of statistical analysis with STAT 301 offering a more in depth coverage of the topic. This addition of options is meant to reduce repetitive paperwork since these courses all cover the basic components needed for the AMS prefix course as well as deeper topics. ECON 206 is a course that can count for students who are pursuing a minor in business administration at WKU, this will allow this course to cover both the requirements for the minor as well as the major requirements. MATH 183 is the course that students who take statistics at KCTCS (STA 220) transfers to WKU. STAT 301 is a statistics course that students within the Mechanical Engineering



path take for a technical requirement. This will allow students who transfer from an Engineering degree path to the Manufacturing Engineering Technology (MET) Degree to use coursework they have previously obtained without the need for the exception form process thus reducing paperwork.

- 3.4** Add options of AMS 401 as well as keep the AMS 398 or UC 400 for Internship course. These courses cover different populations of students that need to have this credit for graduation. AMS 398 is a traditional internship within a company, UC 400 is meant for students working on a fuse grant (research emphasis course) and AMS 401 is for International students who are not on a fuse grant, but also cannot work in the USA, this is meant to alleviate a bottleneck in the system that many international students have come across while trying to fill this requirement within the Manufacturing Engineering Technology (MET) Degree.
- 3.5** Add option of ME 240 as well as keep the AMS 217 course. These courses within the School of Engineering and Applied Sciences cover materials characteristics and testing. This addition of options is meant to reduce repetitive paperwork since the Engineering course covers the basic components needed for the AMS prefix course as well as deeper topics. This will allow students who transfer from a Mechanical Engineering degree path to the Manufacturing Engineering Technology (MET) Degree to use coursework they have previously obtained without the need for the exception form process thus reducing paperwork.
- 3.6** Add options of MGT 314 as well as keep the AMS 356 for Systems design and operation. The MGT 314 course is a component of the Minor in Business administration, which a number of the students in the MET program are pursuing. MGT is Operations Management, which is in line with the content for the AMS 356 course. This will allow students who are getting the Minor in Business Administration and the major in Manufacturing Engineering Technology (MET) Degree to use coursework they have previously obtained for both credentials.
- 3.7** Add option of COMM 330 or COMM 348 as well as keeping the options of COMM 345 or COMM 346 or COMM 349(K-SY) or COMM 362 or MGT 361, All of these courses deal with Advanced communications topics. The addition of these other courses will allow different options for students to assist with alleviation of scheduling bottlenecks in their degree completion.

#### **Section 4: Consultations**

Do any of the proposed revisions in section 3 above involve or in any other way impact other departments/units? YES

Discussion occurred between faculty, within the School of Engineering and Applied Sciences (SEAS), in regard to the ME and EE prefixed classes, with minimal impact to their programs since students will already have completed these courses.

The department chair of Management was contacted on 02.20.2020. Estimated initial impact on the course is approximately 5-7 students per year.

The department chair of Economics was contacted on 02.05.2020. Estimated impact is 5-7 students per semester.

The department chair of Math was contacted on 02.04.2020. Estimated initial impact on the program is approximately 5-7 students per semester.

The department chair of Communications was contacted on 02.23.2020. Estimated impact is 5-7 students per year.

**Section 5: Proposed term for implementation:** Spring 2021

**Section 6: Approval Flow Dates:**

SEAS: **4-10-2020**

Ogden College Curriculum Committee:

Undergraduate Curriculum Committee:

University Senate:

**Section 7: Required Appendices: Current & proposed program descriptions:**

**7.1 Current Program Requirement: 61 hours**

<b>Technical Core:</b>		<b>37 hrs</b>
Finance Selective	ACCT 200 or MKT 220 or FIN 161 (E-SB) or ECON 202 or ECON 203	3
Agricultural Mechanics	AGMC 371/372	3
Basic Electricity	AMS 120	3
CAD and Drafting	AMS 205 or AMS 163	3
Industrial Statistics	AMS 271	3
Internship I	AMS 398 or UC 400	1
Senior Research	AMS 490E	3
Robotics and Machine Vision	AMS 328	3
Industrial Materials	AMS 217	3
Manufacturing Methods	AMS 227	3
Manufacturing Operations	AMS 342	3
Automated Systems	AMS 343	3
Computer Numeric Control	AMS 370	3
<b>Management Core:</b>		<b>24 hrs</b>
Ergonomics and Safety	AMS 310	3
Systems Design and Operation	AMS 356	3
Project Management	AMS 390	3
Technology Mgmt./Sup./Team Blding	AMS 430	3
Quality Assurance	AMS 371	3
Lean and Supply Chain Systems	AMS 394	3
Communications Selective	COMM 345 or COMM 346 or COMM 349(K-SY) or COMM 362 or MGT 361	3
Business Law Selective	MGT 301 or MGT 333	3
Program Electives		17 or 18
<b>Colonnade (New)</b>		<b>41 or 42</b>
F-WC	ENG 100	3
F-WC	ENG 300	3
F-AH	ENG 200	3
F- OC	COMM 145	3
F-QR	MATH 117	3
F-SB	HIST 101 or HIST 102	3
E-AH	SELECT	3
E-SB	SELECT	3
E-NS/SL	CHEM 105/106(4 cr) OR 120/121(5 cr)	4 or 5
E-NS	Phys 231/232 (4cr)	4
K-SC	SELECT	3
K-LG	SELECT	3
K-SY	SELECT	3
<b>Program Grand Total Hours:</b>		<b>120</b>

## 7.2 1 Current Program Requirement: 61 hours

<b>Technical Core:</b>		<b>37 hrs</b>
Finance Selective	ACCT 200 or MKT 220 or FIN 161 (E-SB) or ECON 202 or ECON 203	3
Agricultural Mechanics	AGMC 371/372	3
Basic Electricity ( <b>Digital Circuits, Circuits and Networks</b> )	AMS 120 <b>or EE 180 or EE 210</b>	3
CAD ( <b>Freshman Design II</b> )	AMS 205 or AMS 163 <b>or ME 180</b>	3
Industrial Statistics ( <b>Statistics</b> )	AMS 271 <b>or ECON 206 or MATH 183 or STAT 301</b>	3
Internship I ( <b>Contemporary Issues</b> )	AMS 398 or UC 400 <b>or AMS 401</b>	1
Senior Research	AMS 490E	3
Robotics and Machine Vision	AMS 328	3
Industrial Materials ( <b>Materials/ Methods Manufacturing</b> )	AMS 217 <b>or ME 240</b>	3
Manufacturing Methods	AMS 227	3
Manufacturing Operations	AMS 342	3
Automated Systems	AMS 343	3
Computer Numeric Control	AMS 370	3
<b>Management Core:</b>		<b>24 hrs</b>
Safety and Ergonomics	AMS 310	3
Systems Design and Operation ( <b>Operations Management</b> )	AMS 356 <b>or MGT 314</b>	3
Project Management	AMS 390	3
Technology Mgmt./Sup./Team Blding	AMS 430	3
Quality Assurance	AMS 371	3
Lean and Supply Chain Systems	AMS 394	3
Communications Selective	COMM 345 or COMM 346 or COMM 349(K-SY) or COMM 362 or MGT 361 <b>or COMM 330 or COMM 348</b>	3
Business Law Selective	MGT 301 <b>or MGT 333</b>	3
<b>Program Electives</b>		<b>17 or 18</b>
<b>Colonnade (New)</b>		<b>41 or 42</b>
F-WC	ENG 100	3
F-WC	ENG 300	3
F-AH	ENG 200	3
F- OC	COMM 145	3
F-QR	MATH 117	3
F-SB	HIST 101 or HIST 102	3
E-AH	SELECT	3
E-SB	SELECT	3
E-NS/SL	CHEM 105/106(4 cr) OR 120/121(5 cr)	4 or 5
E-NS	Phys 231/232 (4cr)	4
K-SC	SELECT	3
K-LG	SELECT	3
K-SY	SELECT	3

<b>Program Grand Total Hours:</b>		<b>120</b>
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**BACHELOR of Science in Manufacturing Engineering Technology**  
 School of Engineering and Applied Science  
 Ogden College of Science and Engineering  
 Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.

**SAMPLE - 4 year plan**

FIRST YEAR	Fall Semester		Spring Semester	
<b>Finance Selective Options:</b> ACCT 200 ECON 202 ECON 203 FIN 161 (E-SB) MKT 220	AMS 120 Basic Electricity OR EE 180 Digital Circuits OR EE 210 Circuits and Networks	3	AMS 163 Architectural Drafting OR AMS 205 CADD for Manufacturing OR ME 180 Freshman Design II	3
	ENG 100 Intro to College Writing (F-W1)	3	AMS 271 Industrial Statistics OR ECON 206 Business Statistics OR MATH 183 Statistics OR STAT 301 Probability/Applied Statistics	3
	CHEM 105/106 OR 120/121(E-NS/SL)	4/5	Finance Selective (E-SB) (See Note)	3
	MATH 117 Trigonometry (F-QR)	3	ENG 200 Intro to Literature (F-AH)	3
	Elective	2/1	COMM 145 Fund of Public Speaking & Communications (F-OC)	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	

SECOND YEAR	Fall Semester		Spring Semester	
<b>Business Law Selective Options:</b> MGT 301 MGT 333	AMS 227 Introduction to Manufacturing Methods	3	AMS 371 Quality Assurance	3
	Exploration (E-AH)	3	PHYS 231/232, (E-NS)	4
	HIST 101 World History I OR HIST 102 World History II (F-SB)	3	Business Law Selective (See Note)	3
	World Language, if needed, OR General Elective	3	ENG 300 Writing in the Disciplines (F-W1)	3
	AMS 217 Industrial Materials OR ME 240 Materials/Methods Manufacture	3	Elective	2
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	

**World Language Proficiency:** All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to [www.wku.edu/modernlanguages/placement/](http://www.wku.edu/modernlanguages/placement/).

**Colonnade Plan:** All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [http://www.wku.edu/colonnade/documents/approved\\_colonnade\\_courses\\_website.pdf](http://www.wku.edu/colonnade/documents/approved_colonnade_courses_website.pdf)

THIRD YEAR	Fall Semester		Spring Semester	
<b>Communications Selective Options:</b> COMM 330 COMM 345 COMM 346 COMM 348 COMM 349 (K-SY) COMM 362 MGT 361	AMS 390 Project Management	3	AMS 328 Robotics and Machine Vision	3
	AMS 356 Systems Design/Operations OR MGT 314 Operations Management	3	SEAS 310 Work Design/Ergonomics	3
	AMS 343 Automated Systems	3	AGMC 371/ 372 or elective	3
	Communications Selective (See note)	3	Elective	3
	Connections: Social and Cultural (K-SC)	3	Connections: Local to Global Course (K-LG)	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>

FOURTH YEAR	Fall Semester		Spring Semester	
Electives should be chosen in consultation with MAJOR Advisor	AMS 394 Lean Manufacturing	3	AMS 430 Technology Management/Supervision/Team Building	3
	AMS 370 Computer Numeric Control	3	AMS 490E Senior Research	3
	AMS 398 Internship OR AMS 401 Contemporary Issues OR UC 400 FUSE experience	1	AMS 342 Manufacturing Operations	3
	Connections: Systems (K-SY)	3	Elective OR AGMC 371/ 372	3
	Elective	5	Elective	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>15</b>

Total Credit Hours: 120

**For more Information:**

School of Engineering and Applied Sciences

Website: <http://www.wku.edu/seas>

Phone: (270) 745-3251

Email: [seas@wku.edu](mailto:seas@wku.edu)

Course Description: <http://www.wku.edu/undergraduatecatalog/>

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MET Program # 5006 Bob Hatfield <drbobhatfield@gmail.com>, Management was contact

- What are the potential budget implications for this proposal? If any additional staffing is required, how will it be funded? If not, how will current staffing accommodate the proposed course/program?

NONE: SEAS Internal Discussion took place 10.15.2019, Management was contact

- If you are proposing a new undergraduate program or changes to an existing undergraduate program, please include a new or updated four-year degree pathway.
- Has the proposal been checked carefully for mechanics, grammar, syntax, and clarity?

Stacy Wilson

Digitally signed by Stacy Wilson  
Date: 2020.04.27 11:52:02  
-0500

Department Head

Dean or Designee

Date

Date