

Engineering Curriculum Committee

Minutes of Meeting #1 September 7, 2020

Present: Marais, Liu, Kvam, Harris, Lu, Alexeenko, Bean, Purzer, Kim, McMillan, Weidner

Recorder: Ortiz

- 1. Meeting was called to order at 12:33pm via Webex.
- 2. Welcome to new members and welcome back to returning members from Marais
- 3. Motion to approve the agenda for meeting #1 was made by Weidner and seconded by Harris. Motion passed unanimously.
- 4. Motion to approve the minutes from meeting #20 (04/27/2020) was made by Purzer and seconded by McMillan. Motion passed.
- 5. A motion was made by Weidner and seconded by Liu to approve the following EFD for distribution to the faculty:
 - a. EFD 12-21 CEM concentration in IDE MS

Discussion led by Weidner. Motion passed unanimously with no abstentions.

- 6. A motion to withdraw the following EFD was made by Weidner and seconded by Kvam:
 - a. EFD 64-20 Professional Master's Degree in CEM
- 7. Old Business
 - a. A request to postpone the open meeting for EFD 27-20 FYE Curriculum update was made by the Director of the VIP Program to allow for additional data collection to occur. The request was granted.
- 6. Motion to adjourn was made by Bean and seconded by Kvam. The meeting adjourned at 12:58pm.



Engineering Curriculum Committee

Minutes of Meeting #2

September 21, 2020

Present: Marais, Liu, Kvam, Alexeenko, Purzer, Weidner, Bean, Lu, Harris, Kim, McMillan

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #2 was made by Harris and seconded by Weidner. Motion passed unanimously.
- 3. Motion to approve the minutes from meeting #1 (09/7/2020) was made by Weidner and seconded by Harris. Motion passed.
- 4. A motion was made by Weidner and seconded by Liu to approve the following Fast-Track EFD on behalf of the faculty:
 - a. EFD 20-21 CEM 45500 Temporary Structures in Construction change in requisites Discussion led by Weidner. Motion passed unanimously with no abstentions.
- 6. A motion to approve the following EFD for distribution to the faculty was made by Marais and seconded by Kvam:
 - a. EFD 53-20 ME 54100 Decision Making in Engineering Design new graduate course Motion to table made by Bean seconded by Harris. Motion passed.

7. Old Business

- a. Fast-Track EFD 14-21 Project Control & Life Cycle Execution of Constructed Facilities change in requisites was approved on behalf of the faculty via online vote on 09/14/2020 Fast-Track
- 8. Motion to adjourn was made by Kvam and seconded by Weidner. The meeting adjourned at 12:52pm.



Engineering Curriculum Committee

Minutes of Meeting #3

September 28, 2020

Present: Marais, Harris, Kvam, McMillan, Liu, Weidner, Howarter, Panchal, Kim, Alexeenko, Lu

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #3 was made by Weidner and seconded by Kvam. Motion passed unanimously.
- 3. Motion to approve the minutes from meeting #2 (09/21/2020) was made by Kvam and seconded by Weidner. Motion passed.
- 4. A motion was made by Weidner and seconded by Liu to approve the following Fast-Track EFD on behalf of the faculty:
 - a. EFD 12-21 CEM concentration in IDE MS

Discussion led by Weidner. Motion to table made by Kvam seconded by Harris.

- 5. A motion was made by Howarter and seconded by Kvam to approve the following Fast-Track EFD on behalf of the faculty:
 - a. EFD 13-21 EEE 69800, 69900 Research MS, PhD Thesis change in requisites

Discussion led by Howarter. Motion passed unanimously.

- 6. A motion to approve the following EFD for distribution to the faculty was made by Panchal and seconded by Kvam:
 - a. EFD 21-21 ME Removing requirement from grad program

Discussion led by Panchal. Motion passed unanimously.

- 7. A motion to approve the following EFD for distribution to the faculty was made by Panchal and seconded by Liu:
 - a. EFD 23-21 ME 53900 Data Analytics for Scientists and Engineers

Discussion led by Panchal. Motion passed unanimously.

- 7. Old Business
 - a. Motion made by Kvam to remove from the table the following EFD 53-20 ME 54100 Decision Making in Engineering Design new graduate course. Discussion led by Panchal. Motion passed

8.	New business: Please send any documentation regarding TA responsibilities or policy guidance that your school or division have to Weidner.
9.	Motion to adjourn was made by Kvam and seconded by Liu. The meeting adjourned at 1:17pm.



Engineering Curriculum Committee

Minutes of Meeting #4

October 5, 2020

Present: Marais, Liu, Kvam, Panchal, Bean, McMillan, Purzer, Weidner, Alexeenko, Harris, Howarter, Kim

Recorder: Ortiz

- 1. Meeting was called to order at 12:33pm via Webex.
- 2. Motion to approve the agenda for meeting #4 was made by Weidner and seconded by McMillan. Motion passed.
- 3. Motion to approve the minutes from meeting #3 (09/28/2020) was made by Weidner and seconded by Kvam. Motion passed with two abstentions.
- 4. A motion to approve the following EFD for distribution to the faculty was made by Marais and seconded by Liu:
 - a. EFD 3-21 ECE 60422 Primer on RF Design new graduate course
 - b. EFD 4-21 ECE 60423 RF System Design new graduate course
 - c. EFD 5-21 ECE 60424 RF Design: Passive and Active Components—new graduate course

Discussion led by Marais. Motion was amended to include all courses in the original motion was made by Marais and seconded by Weidner. Amended motion passed.

- 5. A motion to approve the following EFD for distribution to the faculty was made by Marais and seconded by Weidner:
 - a. EFD 6-21 ECE 60858 Introduction to Operating Systems— new graduate course Discussion led by Marais. Motion to table made by Marais and seconded by Kvam.
- 9. Old Business
 - a. Tabled EFD 12-21 CEM Concentration in IDE MS
- 8. New business: Note from the committee it is preferable for a school or division with agenda items to ensure that their representative attend the meeting because the representative can respond to questions and facilitate the efficient processing of the EFD(s).
- 9. Motion to adjourn was made by Harris and seconded by Kvam. The meeting adjourned at 12:54pm.



Engineering Curriculum Committee

Minutes of Meeting #5 October 12, 2020

Present: Marais, Liu, Kvam, Panchal, Bean, McMillan, Purzer, Weidner, Harris, Kim, Comer, Lu

Recorder: Ortiz

- 1. Meeting was called to order at 12:33pm via Webex.
- 2. Motion to approve the agenda for meeting #5 was made by Harris and seconded by Weidner. Motion passed.
- 3. Motion to approve the minutes from meeting #4 (10/05/2020) was made by Liu and seconded by Weidner. Motion passed with two abstentions.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Panchal and seconded by Harris:
 - a. EFD 21-21 ME Removing requirement for grad program

Discussion led by Panchal. Motion passed with one abstention.

- 5. A motion to approve the following EFD for distribution to the faculty was made by Comer and seconded by Kvam:
 - a. EFD 6-21 ECE 30653 Introduction to Nanotechnology and Quantum Science & Technology
 new undergraduate course

Motion to table made by Marias seconded by Kvam.

- 9. Old Business
 - a. Tabled EFD 12-21 CEM Concentration in IDE MS
 - b. Tabled EFD 6-21 ECE 60858 Introduction to Operating Systems new graduate course
 - c. Flagged EFD 73-20 ME 54100 Decision Making in Engineering Design chair is meeting with faculty involved
 - d. Flagged EFD 23-21 ME 53900 Data Analytics for Scientists and Engineers chair is meeting with faculty involved
- 9. Motion to adjourn was made by Kvam and seconded by Weidner. The meeting adjourned at 12:49pm.



Engineering Curriculum Committee

Minutes of Meeting #6

October 19, 2020

Present: Marais, Kvam, Comer, Harris, Purzer, Weidner, Panchal, McMillan, Liu, Alexeenko, Kim, Bean

Recorder: Ortiz

- 1. Meeting was called to order at 12:31pm via Webex.
- 2. Motion to approve the agenda for meeting #6 was made by Weidner and seconded by Liu. Motion passed.
- 3. Motion to approve the minutes from meeting #5 (10/12/2020) was made by McMillan and seconded by Harris. Motion passed.
- 4. A motion to approve the following EFDs on behalf of the faculty was made by Comer and seconded by Harris:
 - a. EFD 3-21 ECE 60422 Primer on RF Design new graduate course
 - b. EFD 4-21 ECE 60423 RF System Design new graduate course
 - c. EFD 5-21 ECE 60424 RF Design: Passive and Active Components— new graduate course

Motion passed.

- 5. A motion to approve the following EFD for distribution to the faculty was made by Panchal and seconded by Kvam:
 - a. EFD 31-21 ME 53101 Particle, Powder and Compact Characterization New graduate course
 - b. EFD 32-21 ME 53102 Particle, Powder and Compact Characterization Laboratory New graduate course

Discussion led by Panchal. Motion passed.

- 6. A motion to approve the following EFD for distribution to the faculty was made by Kim and seconded by Kvam:
 - a. EFD 24-21 BME 64600 Deep Learning Theory and Practice of Deep Neural Networks new graduate course

Discussion led by Kim. Motion passed.

- 7. A motion to approve the following EFD for distribution to the faculty was made by Kim and seconded by Comer:
 - a. EFD 25-21 BME 56400 Ethical Engineering of Medical Technologies new graduate course Discussion led by Kim. Motion passed.
- 8. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Weidner:
 - a. EFD 28-21 ABE 42500 Water Quality Engineering new undergraduate course Discussion led by McMillan. Motion passed.
- 9. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Weidner:
 - a. EFD 29-21 ABE 42600 Ecological Restoration Engineering new graduate course Discussion led by McMillan. Motion passed.
- 10. A motion to remove from the table the following EFD was made by Comer and seconded by Weidner:
 - a. EFD 22-21 ECE 30653 Introduction to Nanotechnology and Quantum Science & Technology new undergraduate course

Discussion led by Comer. Motion passed.

- 11. A motion to remove from the table the following EFD was made by Comer and seconded by Weidner:
 - a. EFD 6-21 ECE 60858 Introduction to Operating Systems new graduate course Discussion led by Comer. Motion passed
- 12. Old Business
 - a. Tabled EFD 12-21 CEM Concentration in IDE MS
 - b. Flagged EFD 73-20 ME 54100 Decision Making in Engineering Design conversation is ongoing
 - c. Flagged EFD 23-21 ME 53900 Data Analytics for Scientists and Engineers conversation is ongoing
- 13. Motion to adjourn was made by Harris and seconded by McMillan. The meeting adjourned at 1:13pm.



Engineering Curriculum Committee

Minutes of Meeting #7

November 2, 2020

Present: Marais, Bean, Comer, Harris, McMillan, Liu, Weidner, Howarter, Purzer, Kim, Lu, Panchal

Recorder: Ortiz

- 1. Meeting was called to order at 12:31pm via Webex.
- 2. Motion to approve the agenda for meeting #7 was made by Harris and seconded by Weidner. Motion passed.
- 3. Motion to approve the minutes from meeting #6 (10/19/2020) was made by Weidner and seconded by Bean. Motion passed.
- 4. A motion to approve the following EFDs on behalf of the faculty was made by Harris and seconded by Liu:
 - a. EFD 6-21 ECE 60858 Introduction to Operating Systems new graduate course
 - b. EFD 22-21 ECE 30653 Introduction to Nanotechnology and Quantum Science & Technology new undergraduate course

Motion passed.

- 5. A motion to approve the following EFDs on behalf of the faculty was made by McMillan and seconded by Weidner:
 - a. EFD 28-21 ABE 42500 Water Quality Engineering new undergraduate course
 - b. EFD 29-21 ABE 42600 Ecological Restoration Engineering new undergraduate course

Motion passed.

- 6. A motion to approve the following EFDs on behalf of the faculty was made by Kim and seconded by Bean:
 - a. EFD 24-21 BME 64600 Deep Learning Theory and Practice of Deep Neural Networks new graduate course
 - b. EFD 25-21 BME 56400 Ethical Engineering of Medical Technologies new graduate course Motion passed.
- 7. A motion to approve the following EFDs on behalf of the faculty was made by Panchal and seconded by Harris:
 - a. EFD 31-21 ME 53101 Particle, Powder and Compact Characterization New graduate course

- b. EFD 32-21 ME 53102 Particle, Powder and Compact Characterization Laboratory New graduate course
- 8. A motion to approve the following EFDs for distribution to the faculty was made by Weidner and seconded by Purzer:
 - a. EFD 13-20 CEM 29700 Experimental Course new undergraduate course
 - b. EFD 14-20 CEM 39700 Experimental Course new undergraduate course

Discussion led by Weidner. Motion passed.

- 12. Old Business
 - a. Tabled EFD 12-21 CEM Concentration in IDE MS
 - b. Flagged EFD 73-20 ME 54100 Decision Making in Engineering Design title will be changing
 - c. Flagged EFD 23-21 ME 53900 Data Analytics for Scientists and Engineers title will be changing
- 13. Motion to adjourn was made by Weidner and seconded by McMillan. The meeting adjourned at 12:47pm.



Engineering Curriculum Committee

Minutes of Meeting #8 November 9, 2020

Present: Marais, Kvam, Harris, Purzer, Weidner, Panchal, McMillan, Liu, Kim, Bean, Howarter, Lu

Recorder: Marais

- 1. Meeting was called to order at 12:31pm via Webex.
- 2. Motion to approve the agenda for meeting #8 was made by McMillan and seconded by Bean. Motion passed.
- 3. Motion to approve the minutes from meeting #7 (11/02/2020) was made by Kvam and seconded by Liu. Motion passed with one abstention
- 4. A motion to approve the following EFD for distribution to the faculty was made by Panchal and seconded by Lu:
 - a. EFD 33-21 ME 53500 Complex Fluids new graduate course

Discussion led by Panchal. Motion passed.

- 5. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Kvam:
 - a. EFD 26-21 ABE 3300 Design of Machine Components change in requisites

Discussion led by McMillan. Motion passed.

- 6. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Harris:
 - a. EFD 27-21 ABE Multiple courses course expirations

Discussion led by McMillan. Motion passed

- 7. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Harris:
 - a. EFD 30-21 ABE ENRE Plan of Study updates

Discussion led by McMillan. Motion passed.

- 8. A motion to approve the following EFD on behalf of the faculty was made by Panchal and seconded by Lu:
 - a. EFD 73-20 ME 54100 Engineering Design: A Decision based approach new graduate course

- Discussion led by Panchal. Title changed to satisfy flag removal. Motion passed.
- 9. A motion to approve the following EFD on behalf of the faculty was made by Panchal and seconded by Lu:
 - a. EFD 23-21 ME 53900 Introduction to Scientific Machine Learning new graduate course Discussion led by Panchal. Title changed to satisfy flag removal. Motion passed.
- 10. Motion to adjourn was made by Weidner and seconded by Bean. The meeting adjourned at 1:07pm.



Engineering Curriculum Committee

Minutes of Meeting #9 November 30, 2020

Present: Marais, Alexeenko, Weidner, Bean, Comer, Liu, Lu, Kvam, Panchal, McMillan, Kim, Purzer

Recorder: Ortiz

- 1. Meeting was called to order at 12:31pm via Webex.
- 2. Motion to approve the agenda for meeting #9 was made by Weidner and seconded by Kvam. Motion passed.
- 3. Motion to approve the minutes from meeting #8 (11/09/2020) was made by Liu and seconded by Kvam. Motion passed with one abstention.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Panchal and seconded by Weidner:
 - a. EFD 33-21 ME 53500 Complex Fluids new graduate course

Motion passed.

- 5. A motion to approve the following EFD on behalf of the faculty was made by McMillan and seconded by Weidner:
 - a. EFD 26-21 ABE 3300 Design of Machine Components change in requisites

Motion passed.

- 6. A motion to approve the following EFD on behalf of the faculty was made by McMillan and seconded by Lu:
 - a. EFD 27-21 ABE Multiple courses course expirations

Motion passed.

- 7. A motion to approve the following EFD on behalf of the faculty was made by McMillan and seconded by Lu:
 - a. EFD 30-21 ABE ENRE Plan of Study updates

Motion passed.

- 8. EFDs 13-20 and 14-20 CEM Experimental courses were approved on 11/16/20.
- 9. Motion to adjourn was made by Kvam and seconded by Weidner. The meeting adjourned at 12:41pm.



Engineering Curriculum Committee

Minutes of Meeting #10

January 25, 2021

Present: Marais, Liu, Troy, Howarter, Harris, Weidner, Kvam, McMillan, Kim

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #10 was made by Harris and seconded by Weidner. Motion passed.
- 3. Motion to approve the minutes from meeting #9 (11/30/2020) was made by Liu and seconded by Weidner. Motion passed with two abstentions.
- 4. A motion to approve the following Fast-Track EFDs on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 35-21 CHE 20500 Chemical Engineering Calculations change in requisites
 - b. EFD 36-21 CHE 21100 Introductory Chemical Engineering Thermodynamics change in requisites

Discussion led by Harris. Motion passed uninaimously.

- 5. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by McMillan:
 - a. EFD 37-21 CHE 32000 Statistical Modeling and Quality Enhancement change in requisites

Discussion led by Harris. Motion to table made by Marais.

- 6. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 38-21 CHE 30000,40000 Chemical Engineering Seminars change in requisites

Discussion led by Harris. Motion to table made by Marais.

- 7. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 39-21 CHE 37700 Momentum Transfer change in requisites

Discussion led by Harris. Motion passed unanimously.

- 8. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 40-21 CHE 34800 Chemical Reaction Engineering change in requisites

Discussion led by Harris. Motion passed unanimously

- 9. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Liu:
 - a. EFD 41-21 CHE 39699 Professional Practice Internship change in requisites

Discussion led by Harris. Motion passed unanimously

- 10. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 42-21 CHE 41100 CHE Undergraduate Research change in title

Discussion led by Harris. Motion passed unanimously

- 11. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Troy:
 - a. EFD 43-21 CHE 49800,49900 Undergraduate Thesis Research I,II change in requisites Discussion led by Harris. Motion passed unanimously
- 12. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Troy:
 - a. EFD 45-21 CHE Data Science new concentration

Discussion led by Harris. Motion to table made by Marais.

- 13. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Kvam:
 - a. EFD 46-21 CHE Distinguished Research new concentration

Discussion led by Harris. Motion passed.

- 14. A motion to approve the following EFD for distribution to the faculty was made by Troy and seconded by Kvam:
 - a. EFD 18-21 CE 33500 Civil Engineering Materials new undergraduate course Discussion led by Troy. Motion passed.
- 15. A motion to approve the following EFD for distribution to the faculty was made by McMillan and seconded by Weidner:
 - a. EFD 61-21 ENGR 13000 Transforming Ideas to Innovation new undergraduate course Motion to table made by Marais.

16. Motion to adjourn was made by Howarter and seconded by Troy. The meeting adjourned at 12:22pm.	



Engineering Curriculum Committee

Minutes of Meeting #11

February 1, 2021

Present: Marais, Weidner, Kvam, Harris, Berger, Bean, Kim, McMillan

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #11 was made by Weidner and seconded by Harris. Motion passed.
- 3. Motion to approve the minutes from meeting #10 (1/25/2021) was made by Weidner and seconded by Harris. Motion passed with one abstention.
- 4. A motion to approve the following Fast-Track EFDs on behalf of the faculty was made by Kvam and seconded by Weidner:
 - a. EFD 30-20 MSE 36700 Materials Processing Lab change in requisites

Discussion led by Kvam. Motion passed unanimously.

- 5. A motion to remove from the table the following Fast-Track EFD was made by Marais:
 - a. EFD 37-21 CHE 32000 Statistical Modeling and Quality Enhancement change in requisites

Discussion led by Harris. Motion to table made by Marais.

- 6. A motion to remove from the table the following Fast-Track EFD was made by Marais:
 - a. EFD 38-21 CHE 30000,40000 Chemical Engineering Seminars change in requisites Discussion led by Harris. Motion to table made by Marais.
- 7. A motion to remove from the table the following EFD was made by Marais:
 - a. EFD 45-21 CHE Data Science new concentration

Discussion led by Harris. Motion to approve for distribution to the faculty was unanimous.

- 8. A motion to remove from the table the following EFD was made by Marais: Berger, Weidner
 - a. EFD 61-21 ENGR 13000 Transforming Ideas to Innovation new undergraduate course

A motion to approve the EFD for distribution to the faculty made by Berger and seconded by Weidner. Discussion led by Berger. Motion approved.

9. EFD 12-21 to remained tabled.



Engineering Curriculum Committee

Minutes of Meeting #12

February 8, 2021

Present: Marais, Bean, Troy, Krousgrill, Berger, Howarter, Weidner, Alexeenko, Kim, Liu, McMillan, Kvam, Comer

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #12 was made by Weidner and seconded by Troy. Motion passed.
- 3. Motion to approve the minutes from meeting #11 (2/1/2021) was made by Weidner and seconded by Bean. Motion passed with five abstentions.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Troy and seconded by Weidner:
 - a. EFD 18-21 CE 33500 Civil Engineering Materials new undergraduate course Discussion led by Troy. Motion passed.
- 5. A motion to approve the following EFD on behalf of the faculty was made by Howarter and seconded by Liu:
 - a. EFD 46-21 CHE Distinguished Research Concentration new concentration Motion passed.
- 6. A motion to approve the following EFD for distribution to the faculty was made by Troy and seconded by Howarter:
 - a. EFD 19-21 CE Plan of Study update

Discussion led by Troy. Motion passed.

- 7. A motion to remove from the table the following Fast-Track EFD was made by Marais:
 - a. EFD 37-21 CHE 32000 Statistical Modeling and Quality Enhancement change in requisites

Discussion led by Marais. Original motion passed unanimously.

- 8. A motion to remove from the table the following Fast-Track EFD was made by Marais:
 - a. EFD 38-21 CHE 30000,40000 Chemical Engineering Seminars change in requisites

Original motion passed unanimously.

- 9. Reminder for ECC members to reach out to your EFD makers to help keep you in the loop.
- 10. Motion to adjourn was made by Krousgill and seconded by Weidner. The meeting adjourned at 12:59pm.



Engineering Curriculum Committee

Minutes of Meeting #13

February 15, 2021

Present: Marais, Weidner, Berger, Harris, Bean, Howarter, Alexeenko, Liu, McMillan, Troy, Comer, Kim, Kvam

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #13 was made by Harris and seconded by Weidner. Motion passed.
- 3. Motion to approve the minutes from meeting #12 (2/8/2021) was made by Harris and seconded by Bean. Motion passed with five abstentions.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Berger and seconded by Weidner:
 - a. EFD 61-21 ENE 13000 Transforming Ideas to Innovations new undergraduate course Discussion led by Berger. Motion passed.
- 5. A motion to approve the following EFD on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 45-21 CHE Data Science Concentration new concentration Motion passed.
- 6. A motion to table the following EFDs was made by Marais and seconded by Harris. Motion passed.
 - a. EFD 44-21 CHE 55400 Smart Manufacturing in Process Industries new graduate course
 - b. EFD 47-21 CHE 52100 Principles of Tissue Engineering new graduate course
 - c. EFD 48-21 CHE 52300 Engineering Applications of Biological Molecules new graduate course
 - d. EFD 49-21 CHE 56000 Intro to Energy Storage Solutions new graduate course
 - e. EFD 50-21 CHE 56200 Battery Systems Lab new graduate course
 - f. EFD 51-21 CHE 56300 Advanced Solar Energy Conversion—new graduate course
 - g. EFD 52-21 CHE 56400 Organic Electronic Materials and Devices new graduate course

- 7. A motion to approve the following Fast-Track EFD for approval on behalf of the faculty was made by Liu and seconded by Weidner:
 - a. EFD 58-20 IE 47400 Industrial Controls System change in requisites

Discussion led by Liu. Motion passed unanimously.

8. Motion to adjourn was made by Kvam and seconded by Weidner. The meeting adjourned at 1:11pm.



Engineering Curriculum Committee

Minutes of Meeting #14

February 22, 2021

Present: Marais, Weidner, Berger, Harris, Howarter, Alexeenko, Liu, McMillan, Troy, Comer, Kim, Kvam

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda for meeting #14 was made by Weidner and seconded by Troy. Motion passed.
- 3. Motion to approve the minutes from meeting #13 (2/15/2021) was made by Harris and seconded by Weidner. Motion passed with five abstentions.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Troy and seconded by Weidner:
 - a. EFD 19-21 CE Plan of Study Update Motion approved.
- 5. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 79-21 CHE 40100 Cooperative Seminar III requisite change

Discussion led by Harris. Motion passed unanimously.

- 6. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Harris and seconded by Weidner:
 - a. EFD 80-21 CHE Professional Co-op III, Professional Practice Extensive Co-op IV
 requisite change

Discussion led by Harris. Motion passed unanimously.

- 7. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Comer:
 - a. EFD 81-21 CHE 38499 Professional Practice Co-op IV new undergraduate course Discussion led by Harris. Motion passed.
- 8. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Comer:
 - a. EFD 82-21 CHE 49500 Chemical Engineering Study Abroad new undergraduate course

Discussion led by Harris. Motion passed.

- 9. A motion to approve the following EFD for distribution to the faculty was made by Kvam and seconded by Harris:
 - a. EFD 78-21 MSE Mechanical Behavior of Polymers new graduate course Discussion led by Kvam. Motion passed.
- 10. Motion to adjourn was made by Weidner and seconded by Kvam. The meeting adjourned at 1:11pm.



Engineering Curriculum Committee

Minutes of Meeting #15

March 1, 2021

Present: Marais, Weidner, Bean, Harris, Liu, Troy, Comer, Berger, Kvam, Alexeenko, Krousgrill, Kim

Guest: Engelberth

Recorder: Ortiz

1. Meeting was called to order at 12:32pm via Webex.

- 2. Motion to approve the agenda as amended for meeting #15 was made by Bean and seconded by Weidner. Motion passed.
- 3. Motion to approve the minutes from meeting #14 (2/22/2021) was made by Weidner and seconded by Comer. Motion passed with one abstention.
- 4. A motion to approve the following EFD for distribution to the faculty was made by Weidner and seconded by Comer:
 - a. EFD 86-21 VIP 37930 Junior Participation Vertically Integrated Projects (VIP) Ext new undergraduate course

Discussion led by Alexeenko. Motion passed.

- 5. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Weidner:
 - a. EFD 87-21 VIP 47930 Senior Participation Vertically Integrated Projects (VIP) Ext new undergraduate course

Motion passed.

- 6. A motion to approve the following EFDs was made by Marais:
 - a. EFD 88-21 CEM 58800 Pipeline Condition Assessment and Integrity Management new graduate course
 - b. EFD 89-21 CEM 58700 Underground Infrastructure Asset Management new graduate course
 - c. EFD 90-21 CEM 58600 Development of Underground Space new graduate course
 - d. EFD 91-21 CEM 58500 Temporary Structures new graduate course

- 7. A motion to approve the following EFD for distribution to the faculty was made by Weidner and seconded by Bean:
 - a. EFD 92-21 CEM Plan of Study updates

Discussion led by Weidner. Motion passed.

- 8. A motion to approve the following EFD for distribution to the faculty was made by Kvam and seconded by Harris:
 - a. EFD 84-21 ABE 40600 Ambassador Leadership Seminar new undergraduate course Discussion led by Engelberth. Motion passed.
- 9. A motion to approve the following EFD for distribution to the faculty was made by Harris and seconded by Kvam:
 - a. EFD 85-21 ABE 53000 Leadership in Biotechnology new undergraduate course Discussion led by Engelberth. Motion to table made by Marais.
- 10. A motion to approve the following Fast-Track EFD on behalf of the faculty was made by Krousgrill and seconded by Harris:
 - a. EFD 83-21 ME 41500 Energy Systems Engineering change in requisites Discussion led by Krousgrill. Motion passed unanimously.
- 11. A motion to approve the following EFD for distribution to the faculty was made by Krousgrill and seconded by Weidner:
 - a. EFD 62-21 ME 45900 Mechanism and Machine Theory new undergraduate course Discussion led by Krousgrill. Motion passed.
- 12. Motion to bring up from the table the following EFD was made by Harris and seconded by Troy:
 - a. EFD 44-21 CHE 55400 Smart Manufacturing in Process Industries new graduate course Discussion led by Harris. Original motion to distribute to the faculty passed.
- 13. Motion to bring up from the table the following EFD was made by Harris and seconded by Comer:
 - a. EFD 47-21 CHE 52100 Principles of Tissue Engineering— new graduate course Discussion led by Harris. Original motion to distribute to the faculty passed.
- 14. Motion to bring up from the table the following EFD was made by Harris and seconded by Bean:
 - a. EFD 50-21 CHE 56200 Battery Systems Lab- new graduate course
 - Discussion led by Harris. Original motion to distribute to the faculty passed.
- 15. Motion to adjourn was made by Weidner and seconded by Kvam. The meeting adjourned at 1:27pm.



Engineering Curriculum Committee

Minutes of Meeting #16

March 8, 2021

Present: Marais, Weidner, Bean, Harris, Liu, Troy, Howarter, Berger, Kvam, Alexeenko, Krousgrill, McMillan

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda as amended for meeting #16 was made by Weidner and seconded by Krousgrill. Motion passed.
- 3. Motion to approve the minutes from meeting #15 (3/01/2021) was made by Weidner and seconded by Harris. Motion passed with one abstention.
- 4. A motion to approve the following EFD on behalf of the faculty was made by Kvam and seconded by Harris:
 - a. EFD 78-21 MSE Mechanical Behavior of Polymers new graduate course Motion passed.
- 5. A motion to approve the following EFDs on behalf of the faculty was made by Harris and seconded by Kvam: CHE EFDs 81,82
 - a. EFD 81-21 CHE 38499 Professional Practice Co-op IV requisite change
 - b. EFD 82-21 CHE 49500 Chemical Engineering Study Abroad new undergraduate course Motion passed.
- 6. A motion to remove from the table the following EFDs from CEM and CHE was made by Marais.
- 7. A motion to distribute to the faculty the following was made by Weidner and seconded by Bean
 - a. EFD 88-21 CEM 58800 Pipeline Condition Assessment and Integrity Management new graduate course

Discussion led by Weidner. Motion passed

- 8. A motion to distribute to the faculty the following was made by Weidner and seconded by Troy
 - a. EFD 89-21 CEM 58700 Underground Infrastructure Asset Management new graduate course

Discussion led by Weidner. Motion passed

- 9. A motion to distribute to the faculty the following was made by Weidner and seconded by Bean
 - a. EFD 90-21 CEM 58600 Development of Underground Space new graduate course Discussion led by Weidner. Motion passed
- 10. A motion to distribute to the faculty the following was made by Weidner and seconded by Harris
 - a. EFD 91-21 CEM 58500 Temporary Structures new graduate course
 - Discussion led by Weidner. Motion passed
- 11. Motion to adjourn was made by McMillan and seconded by Weidner. The meeting adjourned at 12:54pm.



Engineering Curriculum Committee

Minutes of Meeting #17

March 15, 2021

Present: Marais, Weidner, Bean, Harris, Liu, Troy, Howarter, Berger, Kvam, Alexeenko, Krousgrill, McMillan

Recorder: Ortiz

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda as amended for meeting #17 was made by Weidner and seconded by Krousgrill. Motion passed.
- 3. Motion to approve the minutes from meeting #16 (3/08/2021) was made by Weidner and seconded by Harris. Motion passed with one abstention.
- 4. A motion to approve the following EFDs on behalf of the faculty was made by Harris and seconded by Bean:
 - a. EFD 44-21 CHE 55400 Smart Manufacturing in Process Industries new graduate course
 - b. EFD 47-21 CHE 52100 Principles of Tissue Engineering new graduate course
 - c. EFD 50-21 CHE 56200 Battery Systems Lab- new graduate course

Motion passed.

- 5. A motion to approve the following EFDs on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 86-21 VIP 37930 Junior Participation Vertically Integrated Projects (VIP) Ext new undergraduate course
 - b. EFD 87-21 VIP 47930 Senior Participation Vertically Integrated Projects (VIP) Ext new undergraduate course

Motion passed.

- 6. A motion to approve the following EFD on behalf of the faculty was made by Krousgrill and seconded by Weidner:
 - a. EFD 62-21 ME 45900 Mechanism and Machine Theory new undergraduate course Motion passed.

- 7. A motion to approve the following EFD on behalf of the faculty was made by McMillan and seconded by Weidner:
- a. EFD 84-21 ABE 40600 Ambassador Leadership Seminar new undergraduate course Motion passed.
- 8. A motion to remove from the table the following EFDs was made by Harris.
 - a. EFD 52-21 CHE 56400 Organic Electronic Materials and Devices— new graduate course Discussion led by Harris. Original motion to approve for distribution to the faculty passed.
- 9. A motion to remove from the table the following EFDs was made by McMillan.
 - a. EFD 85-21 ABE 53000 Leadership in Biotechnology new undergraduate course No new document

Discussion led by McMillan. Original motion to approve for distribution to the faculty passed.

10. Motion to adjourn was made by McMillan and seconded by Weidner. The meeting adjourned at 1:11pm.



Engineering Curriculum Committee

Minutes of Meeting #18

March 29, 2021

Present: Marais, Weidner, Krousgrill, Comer, Harris, Kvam, McMillan, Alexeenko, Berger, Troy, Liu, Howarter, Kim

Recorder: Ortiz

- 1. Meeting was called to order at 12:36pm via Webex.
- 2. Motion to approve the agenda as amended for meeting #18 was made by Weidner and seconded by Howarter. Motion passed.
- 3. Motion to approve the minutes from meeting #17 (3/15/2021) was made by Harris and seconded by Liu. Motion passed with one abstention.
- 4. A motion to approve the following EFDs on behalf of the faculty was made by McMillan and seconded by Comer:
 - a. EFD 85-21 ABE 53000 Leadership in Biotechnology new undergraduate course Motion passed.
- 5. A motion to approve the following EFDs on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 52-21 CHE 56400 Organic Electronic Materials and Devices— new graduate course Motion passed.
- 6. Motion to remove from the table the following EFD was made by Harris and seconded by Comer:
 - a. EFD 48-21 CHE 52300 Engineering Applications of Biological Molecules— new graduate course

Discussion led by Harris. Original motion to approve for distribution to the faculty passed.

- 7. Motion to remove from the table the following EFD was made by Harris and seconded by McMillan:
 - a. EFD 49-21 CHE 56000 Intro to Energy Storage Solutions— new graduate
 - Discussion led by Harris. EFD is returned to the table.
- 8. Update on Flagged EFDs:
 - a. For the CEM courses and Plan of Study change dialogue facilitation between CE and CEM occurring.

- b. EFD 27-20 FYE Curriculum dialogue between ENE and VIP program is ongoing and making progress towards resolution
- 9. Update from UGAC CHE concentrations are moving through the University process and other colleges have made several suggestions for changes.
- 10. When a course wants to increase a pre-req grade requirement, the EFD must explain why the higher grade is needed by the receiving course.
- 11. Motion to adjourn was made by Weidner and seconded by McMillan. The meeting adjourned at 1:22pm.



Engineering Curriculum Committee

Minutes of Meeting #19

April 5, 2021

Present: Marais, Troy, Krousgrill, Kvam, Howarter, Comer, Harris, Bean, Weidner, McMillan, Kim

Recorder: Marais

- 1. Meeting was called to order at 12:32pm via Webex.
- 2. Motion to approve the agenda as amended for meeting #19 was made by Weidner and seconded by Troy. Motion passed.
- 3. Motion to approve the minutes from meeting #18 (3/29/2021) was made by Krousgrill and seconded by Comer. Motion passed with one abstention.
- 4. A motion to remove from the table the following EFD was made by Weidner.
 - a. EFD 49-21 CHE 56000 Intro to Energy Storage Solutions— new graduate course Discussion led by Harris. Original motion to approve for distribution to the faculty passed.
- 5. Old Business: EFD 92-21 CEM Plan of Study Updates will be discussed in an open meeting on April 12, 2021.
- 6. Motion to adjourn was made by Harris and seconded by Comer. The meeting adjourned at 12:57pm.



Engineering Curriculum Committee

Minutes of Meeting: Open Meeting April 12, 2021

ECC Members Present: Marais, Weidner, Harris, Berger, Kvam, Comer, Krousgrill, Bean, Troy, Liu, Alexeenko, Kim, Howarter

Recorder: Ortiz

- 1. Open ECC meeting was called to order at 12:32pm via Webex.
- 2. EFD 92-21 CEM Plan of Study Updates introduced by Marais.
- 3. Discussion regarding courses that can count for CE 47300. There is a list of specific courses from other institutions currently listed on the Purdue Course Equivalency Database. The current wording on the EFD doesn't specify any particular courses.
- 4. Concern expressed that a 2 or 3-credit hour course taken somewhere else is not equivalent as a 4-credit hour class at Purdue. The words pertaining to equivalence have been removed from the most recent version of the EFD.
- 5. Open meeting adjourned at 12:50pm.



Engineering Curriculum Committee

Minutes of Meeting #20

April 12, 2021

Present: Marais, Troy, Krousgrill, Kvam, Howarter, Comer, Harris, Bean, Weidner, Kim, Alexeenko, Liu, Berger

Recorder: Ortiz

- 1. Meeting was called to order at 12:51pm via Webex.
- 2. Motion to approve the agenda for meeting #20 was made by Weidner and seconded by Harris. Motion passed.
- 3. Motion to approve the minutes from meeting #19 (4/05/2021) was made by Bean and seconded by Krousgrill. Motion passed with one abstention.
- 4. A vote to approve the following EFD on behalf of the faculty based on discussion from the open meeting of all faculty
 - a. EFD 92-21 CEM Plan of Study Updates

From closed poll in WebEx, this motion is approved by a vote of 10 to 2.

- 5. Motion to approve on behalf of the faculty the following Fast-Track EFD:
 - a. EFD 93-21 AAE 33900 Aerospace Propulsion update to learning outcomes

Discussion led by Marais. Motion passed unanimously.

- 6. Motion to remove from the table the following EFD made by Harris:
 - a. EFD 11-20 CHE Data Science Concentration for Professional Master's Program Discussion led by Harris. Motion passed.
- 7. Old business: flagged EFDs are currently in discussion with the chair and the parties involved.
- 8. Motion to adjourn was made by Weidner and seconded by Howarter. The meeting adjourned at 1:16pm.



Engineering Curriculum Committee

Minutes of Meeting #21

April 26, 2021

Present: Marais, Liu, Berger, Kvam, Comer, Harris, Bean, McMillan, Kim, Weidner, Howarter

Recorder: Ortiz

- 1. Meeting was called to order at 12:35pm via Webex.
- 2. Motion to approve the minutes from Closed meeting #20 (4/12/2021) was made by Weidner and seconded by Harris. Motion passed with one abstention.
- 3. Motion to approve the minutes from Closed meeting #20 (4/12/2021) was made by and seconded by Weidner. Motion passed with one abstention.
- 4. Motion to approve the agenda for meeting #21 was made by Weidner and seconded by Bean. Motion passed as amended.
- 5. Motion to approve the following EFD on behalf of the faculty was made by Harris and seconded by Howarter:
 - a. EFD 48-21 CHE 52300 Engineering Applications of Biological Molecules new graduate course

Motion passed.

- 6. Motion to distribute to the faculty the following EFD was made by Harris and seconded by Liu:
 - a. EFD 76-21 CHE Concentration in Healthcare Technology for Online IDE Master's Program
 new graduate concentration

Discussion led by Harris. Motion to table made by Marais.

- 7. Motion to distribute to the faculty the following EFD was made by Harris and seconded by Howarter:
 - a. EFD 77-21 CHE Grad Certificate in Healthcare Technology new graduate concentration Discussion led by Harris. Motion to table made by Marais.
- 8. Motion to approve on behalf of the faculty the following Fast-Track EFD made by Kim and seconded by:
 - a. EFD 1-22 BME 20500 Biomolecular and Cellular Systems Lab change in offering
 - b. EFD 2-22 BME 20600 Biomechanics and Biomaterials Lab change in offering Discussion led by Kim. Motion passed unanimously.

- 9. Motion to distribute to the faculty the following EFD was made by Harris and seconded by Kvam:
 - a. EFD 73-21 CHE 50100 Medical Devices new graduate course

Discussion led by Harris. Motion passed.

- 10. Motion to distribute to the faculty the following EFD was made by Harris and seconded by Howarter:
 - a. EFD 57-17 CHE 60000 Approaches to Chemical Engineering Research new graduate course

Discussion led by Harris. Motion passed.

- 11. Old business: no changes.
- 12. Motion to adjourn was made by Weidner and seconded by Bean. The meeting adjourned at 1:23pm.



Engineering Curriculum Committee

Minutes of Meeting #22

May 03, 2021

Present: Marais, Liu, Berger, Kvam, Harris, Bean, McMillan, Krousgrill, Liu, Kim

Recorder: Ortiz

- 1. Meeting was called to order at 12:35pm via Webex.
- 2. Motion to approve the agenda for meeting #22 was made by Bean and seconded by Harris. Motion passed as amended.
- 3. Motion to approve the minutes from meeting #21 (4/26/2021) was made by Liu and seconded by Harris. Motion passed with one abstention.
- 4. Motion to approve the following EFD on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 49-21 CHE 56000 Intro to Energy Storage Solutions— new graduate course Motion passed.
- 5. Motion to approve the following EFD on behalf of the faculty was made by Harris and seconded by Kvam:
 - a. EFD 11-20 CHE Data Science Concentration for Professional Master's Program

Motion passed.

- 6. Motion to distribute to the faculty the following EFD was made by Harris and seconded by Liu:
 - a. EFD 74-21 CHE 50200 Analytical Approach to Healthcare Delivery new graduate course Discussion led by Harris. Motion passed.
- 7. New business: Thank you for your service: Robert Bean, Tae Yoon Kim, Chuck Krousgrill, Cary Troy.
- 8. Old business: no changes.
- 9. Motion to adjourn was made by Bean and seconded by Krousgrill. The meeting adjourned at 12:59pm.