

BUTLER UNIVERSITY • DEPARTMENT OF ART

DUAL DEGREE: B.A. IN ART + DESIGN (from Butler University) PLUS B.S. IN ENERGY ENGINEERING (from Purdue University)

- Engineering contact: Jessica McCormick, 317-940-9021, jrmccorm@butler.edu
- The B.A. degree in Art + Design requires 126 hours, of which 40 hours must be 300 or 400-level courses.
- The Dual Degree of Art + Design and Energy Engineering will fulfill the following Areas of Inquiry in the Butler University Core Curriculum: Perspectives of the Creative Arts, The Natural World, and Analytical Reasoning. In addition, the Dual Degree curriculum fulfills the Writing Across the Curriculum and Speaking Across the Curriculum requirements of the Butler University Core Curriculum; art majors are exempted from the Butler Cultural Requirement because of the performance attendance requirements for all JCA majors. The Indianapolis Community Requirement is NOT satisfied.

Semester 1

| | | |
|---------|------------------------|---|
| ART 105 | Art History Survey 1 | 3 |
| ART 107 | Drawing 1 | 3 |
| FYS 101 | First Year Seminar | 3 |
| PWB__ | Physical Well Being | 1 |
| CH 105 | General Chemistry 1 | 5 |
| DD 190 | Elementary Engr Design | 3 |

Semester 2

| | | |
|-----------|-----------------------------|---|
| ART 205 | Art History Survey 2 | 3 |
| ART 210 | Professional Practices | 3 |
| JC 100-01 | Arts Event Attendance (P/F) | 0 |
| FYS 102 | First Year Seminar | 3 |
| CH 106 | General Chemistry 2 | 5 |
| MA 106** | Calculus & Anal. Geo. 1 | 4 |

***Math placement test required. There is the possibility that the student will need to take MA 101 (Algebra, 3 cr.) and/or MA 102 (Precalculus, 3 cr.) prior to MA 106 and MA 107.*

| | | |
|---------------------|----|----|
| TOTAL Credit Hours: | 18 | 18 |
|---------------------|----|----|

Semester 3

| | | |
|---------|--------------------------|---|
| ART 322 | Painting 1 | 3 |
| ART __ | Art Elective | 3 |
| CS 142 | Intro to Comp Sc & Prog | 3 |
| MA 107 | Calculus & Anal Geo. 2 | 4 |
| PH 201 | Intro to Anal. Physics 1 | 5 |

Semester 4

| | | |
|-----------|-----------------------------|---|
| ART 308 | Graphic Design 1 | 3 |
| ART __ | Art Elective | 3 |
| JC 200-01 | Arts Event Attendance (P/F) | 0 |
| TI ____ | Texts and Ideas | 3 |
| MA 208 | Calculus & Anal. Geo. 3 | 4 |
| PH 202 | Intro to Anal. Physics 2 | 5 |

| | | |
|---------------------|----|----|
| TOTAL Credit Hours: | 18 | 18 |
|---------------------|----|----|

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Semester 5

| | | |
|---------------------|------------------------------|----|
| ART ____ | Art Elective | 3 |
| COM 101 | Rhetoric & the Amer Dem Tra | 3 |
| DD 297 | MATLAB | 1 |
| EEN 22000 | Fund of Electro Mat & En Eng | 3 |
| EEN 22501 | EEN Lab 1 | 1 |
| ME 20000 | Thermodynamics | 3 |
| PH 351-W | Analog Electronics | 4 |
| TOTAL Credit Hours: | | 18 |

Semester 6

| | | |
|---------------------|-------------------------------|----|
| ART ____ | Art Elective | 3 |
| JC 300-01 | Arts Event Attendance (P/F) | 0 |
| GHS ____ | Global and Historical Studies | 3 |
| EEN 24000 | Basic Engineer Mechanics | 4 |
| EEN 25001 | EEN Lab 2 | 1 |
| EEN 26000 | Sustainable Energy | 3 |
| EEN 26200 | Engr Design, Ethics, & Entre | 2 |
| MA 334 | Differential Equations | 3 |
| TCM 250 | Career Planning for Engineers | 1 |
| TOTAL Credit Hours: | | 20 |

Semester 7

| | | |
|---------------------|----------------------------|----|
| ART 453 | Internship | 3 |
| ART ____ | Art Elective | 3 |
| ECE 49500 | Fund of Electrical Energy | 3 |
| EEN 31000 | Fluid Mechanics | 3 |
| EEN 32501 | EEN Lab 3 | 1 |
| EEN 33000 | Dyn Sys Modeling & Measure | 3 |
| MA 215 | Linear Algebra | 3 |
| TOTAL Credit Hours: | | 19 |

Semester 8

| | | |
|---------------------|-------------------------------|----|
| ART 411-C | Thesis | 3 |
| GHS ____ | Global and Historical Studies | 3 |
| EEN 34500 | Renewable Energy Systems | 3 |
| EEN 35001 | EEN Lab 4 | 1 |
| ME 27200 | Mechanics of Materials | 3 |
| ME 31400 | Heat and Mass Transfer | 3 |
| STAT ____ | Statistics Elective | 3 |
| TOTAL Credit Hours: | | 19 |

Semester 9

| | | |
|---------------------|----------------------------|----|
| ECE 32100 | Electromech Motion Devices | 3 |
| EEN 42501 | EEN Lab 5 | 1 |
| EEN 44500 | Renewable Kinetic Energy | 3 |
| EEN ____ | EEN Electives | 3 |
| ME 48200 | Control Systems | 3 |
| TCM 360-W/C | Comm in Engineering Prac | 2 |
| ____ | Tech Electives | 2 |
| TOTAL Credit Hours: | | 17 |

Semester 10

| | | |
|---------------------|-------------------------|----|
| ART ____ | Art Elective | 3 |
| EEN 46200 | Capstone Design | 3 |
| EEN ____ | EEN Electives | 9 |
| ENGR 20010 | Engineering Internship | 1 |
| SW 220-EC | The Economy and Society | 3 |
| TOTAL Credit Hours: | | 19 |

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SUMMARY

REQUIRED ART COURSES:

| | | |
|-----------------------------|-----------------------------|-----------|
| ART 105 | Art History Survey 1 | 3 |
| ART 107 | Drawing 1 | 3 |
| ART 205 | Art History Survey 2 | 3 |
| ART 210 | Professional Practices | 3 |
| ART 308 | Graphic Design 1 | 3 |
| ART 322 | Painting 1 | 3 |
| ART 411-C | Thesis | 3 |
| ART 451, 452, 453 | Internship: Art + Design | 3 |
| JC 100,200, 300, 400 | Arts Event Attendance (P/F) | 0 |
| ART Electives, chosen from: | | 18 |
| ART 207, 307 | Drawing 2, 3 | 3 |
| ART 303/313/323 | Photography 1, 2, 3 | 3 |
| ART 304 | Depiction | 3 |
| ART 305 | Animation and Video | 3 |
| ART 306 | Interactive | 3 |
| ART 311 | Function | 3 |
| ART 312 | Design: His and Theory | 3 |
| ART 314 | Art Museum Studies | 3 |
| ART 315 | Postmodernism in the Arts | 3 |
| ART 316 | Modernism in the Arts | 3 |
| ART 317 | Amer Art & Visual Culture | 3 |
| ART 318, 328 | Graphic Design 2, 3 | 3 |
| ART 319 | World Hist of Photography | 3 |
| ART 320 | Race, Gender, & Sexuality | 3 |
| ART 332, 342 | Painting 2, 3 | 3 |
| ART 360 | Sculpture | 3 |
| ART 380, 381, 382 | Special Topics in Art + Des | 1, 2, 3 |
| ART 401, 402, 403 | Ind Study: Art + Design | 1, 2, 3 |
| ART 499 | Honors Thesis | 3 |
| | TOTAL | 42 |

BUTLER UNIVERSITY CORE CURRICULUM:

| | | |
|--------------|-----------------------------------|-----------|
| FYS 101, 102 | First Year Seminar | 3, 3 |
| GHS ____ | Global & Historical Studies | 3, 3 |
| TI ____ | Texts and Ideas | 3 |
| PWB ____ | Physical Well Being/Marching Band | 1 |
| | TOTAL | 16 |

COURSES REQUIRED FOR THE ENERGY ENGINEERING DEGREE:

| | | |
|-----------|-----------------------------------|---|
| CH 105 | General Chemistry 1 | 5 |
| CH 106 | General Chemistry 2 | 5 |
| COM 101 | Rhetoric & the Amer Dem Tradition | 3 |
| CS 142 | Intro to Computer Sci & Prog | 3 |
| DD 190 | Elementary Engineering Design | 3 |
| DD 297 | MATLAB | 1 |
| ECE 32100 | Electromechanical Motion Devices | 3 |
| ECE 49500 | Fundamentals of Electrical Energy | 3 |
| EEN 22000 | Fund of Electrochem Mat & En Eng | 3 |
| EEN 22501 | EEN Lab 1 | 1 |
| EEN 24000 | Basic Engineering Mechanics | 4 |

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| | | |
|----------------|----------------------------------|------------|
| EEN 25001 | EEN Lab 2 | 1 |
| EEN 26000 | Sustainable Energy | 3 |
| EEN 26200 | Engr Design, Ethics, & Entrepren | 2 |
| EEN 31000 | Fluid Mechanics | 3 |
| EEN 32501 | EEN Lab 3 | 1 |
| EEN 33000 | Dynamic Sys Modeling | 3 |
| EEN 34500 | Renewable Energy Systems | 3 |
| EEN 35001 | EEN Lab 4 | 1 |
| EEN 42501 | EEN Lab 5 | 1 |
| EEN 44500 | Renewable Kinetic Engery | 3 |
| EEN 46200 | Capstone Design | 3 |
| EEN Electives | | 12 |
| ENGR 20010 | Engineering Internship | 1 |
| MA 106* | Calculus & Anal Geometry 1 | 4 |
| MA 107* | Calculus & Anal Geometry 2 | 4 |
| MA 208 | Calculus & Anal Geometry 3 | 4 |
| MA 215 | Linear Algebra | 3 |
| MA 334 | Differential Equations | 3 |
| ME 20000 | Thermodynamics | 3 |
| ME 27200 | Mechanics of Materials | 3 |
| ME 31400 | Heat and Mass Transfer | 3 |
| ME 48200 | Control Systems | 3 |
| PH 201 | Intro to Analytical Physics 1 | 5 |
| PH 202 | Intro to Analytical Physics 2 | 5 |
| PH 351-W | Analog Electronics | 4 |
| SW 220-EC | The Economy and Society | 3 |
| TCM 250 | Career Planning for Engineers | 1 |
| TCM 360-W+C | Comm in Engineering Practice | 2 |
| Tech Electives | | 2 |
| STAT ____ | Statistics Elective | 3 |
| | TOTAL | 126 |

**Students get credit for MA 106 if they receive a 4 or 5 on the Calculus AB AP exam; they receive credit for both MA 106 and MA 107 if they receive a 4 or 5 on the Calculus BC AP exam with a 4 or 5 on the AB subscore.*