Behavioral Science/ Counseling (BA/MA): **45-56 Credit Hours**

**Bachelor of Arts**

**School of Behavioral and Health Sciences**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

WALSH UNIVERSITY
EDUCATION FOR LIFE

| **Student:** | **Advisor:** |
|---|---|

| **Core required courses (15 credit hours)** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PSY 120 Principles of Psychology (1st year) | 3 | |
| | | SOC 101 Principles of Sociology (1st year) | 3 | |
| | | BSC 221 Statistics for Behavioral Sciences | 3 | MATH 104 |
| | | BSC 430 Applied Behavioral Science Seminar (Senior year) | 3 | BSC 560 |
| | | BSC 440 Applied Behavioral Science Internship (Senior year) | 3 | BSC 430 |
| **Choose ANY 6 courses listed from the three content areas below (18 credit hours)** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| **Psychology** | | | | |
| | | PSY 201 Principles of Learning | 3 | |
| | | PSY 251 Physiological Psychology | 3 | |
| | | PSY 309 Critical Issues - Child & Adolescent Development | 3 | |
| | | PSY 340 Addictions | 3 | |
| | | PSY 401 Abnormal Psychology | 3 | |
| **Sociology** | | | | |
| | | SOC 205 Social & Cultural Diversity | 3 | |
| | | SOC 303 Marriage, Family and Intimacy | 3 | |
| | | SOC 311 Medical Sociology | 3 | |
| | | SOC 314 Sociology of Aging | 3 | |
| **Criminal Justice** | | | | |
| | | SOC 210 Juvenile Crime & Justice | 3 | |
| | | SOC 212 Criminal Justice | 3 | |
| | | SOC 305 Criminology | 3 | |
| | | SOC 322 Restorative Justice | 3 | |

| **Core graduate-level courses (all BA/MA students take these four courses; 12 credit hours)** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BSC 502 Research Methods and Program Evaluation **(Senior year)** | 3 | |
| | | BSC 510 Theories of Counseling **(Junior year, 1st term)** | 3 | |
| | | BSC 526 Group Process **(Senior year, 1st term)** | 3 | |
| | | BSC 560 Intro to Counseling & the Counseling Profession **(Junior year, 2nd term)** | 3 | |
| **Additional courses for the following tracks:** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| **School Counseling track ONLY** | | | | |
| | | EDUC 107 School and Society | 2 | |
| | | EDUC 206 Exception. & Multicult. in a Global Society | 3 | |
| **School Counseling track ONLY** | | | | |
| | | EDUC 107 School and Society | 2 | |
| | | EDUC 206 Exception. & Multicult. in a Global Society | 3 | |

| | | | | |
|---|---|---|---|---|
| | | BSC 512 Lifespan Development **(Senior year)** | | |
| | | BSC 503 Assessment in Counseling | | |

**Exit Exam Completed (date)**_____

**Credit Hours: 120+ Main Campus**
**Any repeated courses will not be included in the total earned hours.**
**Need to maintain a GPA of 3.0 to continue in the program.**

Health Sciences – OTA to MOT : **120 Credit Hours**
**Bachelor of Arts**
**School of Behavioral and Health Sciences**
2023-2025 Major Curriculum Sheet
Main Campus Requirements
**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

**B.S. Health Sciences OTA to MOT Degree Advancement –60 transfer credits, 1st year = 30 credits, 2nd year = 30 credit hours first 2 semesters in OT program= 120 credits**

***STUDENT MUST HAVE COMPLETED A MINIMUM OF 90 CREDIT HOURS BEFORE ADMISSION TO THE MASTER OF OCCUPATIONAL THERAPY PROGRAM IN ORDER TO GRADUATE WITH A BACHELOR OF SCIENCE DEGREE UPON COMPLETION OF FIRST YEAR OF THE MASTER OF OCCUPATIONAL THERAPY PROGRAM. ***

| **1st year Health Sciences Core: 30 Credit Hours** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | EXS 263 Personal/Community Health | 3 | |
| | | EXS 385 Biomechanics | 3 | |
| | | ENG 240 Professional Writing | 3 | |
| | | SOC 205 Social and Cultural Diversity | 3 | |
| | | BSC 220 Social Research Methods | 3 | |
| | | SOC 311 Medical Sociology | 3 | |
| | | BSC 320 Ethics and Professional Skills | 3 | |
| | | BSC 221 Statistics for Behavioral Science | 3 | |
| | | PSY 240 Industrial/Organizational Psychology | 3 | |
| | | ODL 200 Introduction to Leadership | 3 | |
| **2nd Year: OT Coursework/Final year of Bachelor's in Health Sciences: 30 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | OT 502 Foundations of Occupational Therapy | 3 | |
| | | OT 503 Human Anatomy | 6 | |
| | | OT 503L Human Anatomy Lab | 0 | |
| | | OT 504 Conditions in Occupational Therapy | 2 | |
| | | OT 506 Task Analysis | 2 | |
| | | OT 508 OT Theory and Frames of Reference | 2 | |
| | | OT 602 OT Evaluation and Assessment Skills | 3 | |
| | | OT 606 Therapeutic Interventions in Pediatrics | 4 | |
| | | OT 608 Biomechanics in Occupational Therapy | 3 | |
| | | OT 610 Neuroscience for the Occupational Therapist | 3 | |
| | | OT 612 Level I Fieldwork A/Seminar | 2 | |

- ***Important Note: 60 credit hours will be transferred from the College or University the student was awarded the Occupational Therapy Assistant degree.**
- **Students who are admitted with an earned associate's degree are eligible for reduced core. Students who have not yet earned an associate's degree will be required to take courses to fulfill the general education requirement.**
- **Credit Hours: 120+ Main Campus**
- **Any repeated courses will not be included in the total earned hours.**
- **NEED TO MAINTAIN A GPA OF 3.0 OR HIGHER TO CONTINUE IN THE PROGRAM**

**LEGAL STUDIES (3+3/3+2):** 36 Credit Hours
**Bachelor of Arts**
**Division of Humanities**
2023-2025 Major Curriculum Sheet
**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

| **Required Core Courses:** 27 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 231 Business Law | 3 | |
| | | BUS 300 Sports Law | 3 | |
| | | GFA 245 TH1: Law & the Legal System | 3 | |
| | | GFA 403 TH1: Constitutional Law | 3 | |
| | | GFA 405 TH1:DV: Civil Rights & Liberties | 3 | |
| | | GFA 430 Internship | 3 | |
| | | PHIL 201 TH1:FD: Introduction to the Art of Thinking | 3 | |
| | | SOC 212 Criminal Justice | 3 | |
| | | SOC 305 Criminology | 3 | |
| | | | | **Total Credits: 27 Credit Hours** |

| **Required Track:** 9 Credit Hours<br>*Students must take 9 total credit hours in a single track to complete the requirements for this major. | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| **Track 1: Business (Select 3 courses)** | | | | |
| | | ECON 203 FD: Principles of Microeconomics | 3 | |
| | | ECON 204 FD: Principles of Macroeconomics | 3 | |
| | | BUS 209 Corporate Finance 1 | 3 | |
| | | BUS 234 Principles of Management | 3 | |
| | | BUS 318 DV: Human Resource Management | 3 | |
| **Track 2: Criminal Justice (All 3 courses are required)** | | | | |
| | | SOC 210 Juvenile Justice | 3 | |
| | | SOC 322 Restorative Justice | 3 | |
| | | BSC 301 DV: Social Psychology | 3 | |
| **Track 3: Government (Select 3 courses)** | | | | |
| | | GFA 205 FD: State & Local Government | 3 | |
| | | GFA 303 H2b: American Political Thought | 3 | |
| | | GFA 323 TH1:DV: Public Policy | 3 | |
| | | GFA 411 TH1: Public Leadership | 3 | |
| | | GFA 415 TH1: International Law | 3 | |
| | | | | **Total Credits: 9 Credit hours** |

****Important 3+3 (Akron/CUA) Note:** 97 credit hours must be completed by the end of the third year at Walsh University. 28 credit hours will be transferred from the University of Akron School of Law or the Catholic University of America School of Law upon completion of the fourth year of the 3+3 program. The B.A. will be awarded by Walsh University. **

****Important 3+2 (Dayton) Note:** 96 credit hours must be completed by the end of the third year at Walsh University. 29 credit hours will be transferred from the University of Dayton School of Law upon completion of the fourth year of the 3+2 program. The B.A. will be awarded by Walsh University. **

# Psychology- Pre-Occupational Therapy Early Assurance:

**Bachelor of Arts – 45-48 Credit Hours for years 1-3**
**School of Behavioral and Health Sciences**
2023-2025 Major Curriculum Sheet
Main Campus Requirements
**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

| **Psychology Foundations (18 credit hours)** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PSYC 120 Principles of Psychology (1st year) | 3 | |
| | | PSYC 210 Human Development | 3 | |
| | | BSC 220 Social Research Methods (Soph. year) | 3 | |
| | | BSC 221 Statistics for Behavioral Sciences | 3 | MATH 104 |
| | | PSYC 251 Behavioral Neuroscience | 3 | |
| | | PSYC 401 Psychological Disorders | 3 | PSYC 251 |
| **Electives – Select two courses from the list below (6 total credit hours)** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PSYC 201 Principles of Learning | 3 | |
| | | PSYC 240 Industrial/Organizational Psychology | 3 | |
| | | PSY 307 Cross-cultural Psychology | 3 | |
| | | PSY 340 Addictions | 3 | |
| | | BSC 301 Social Psychology | 3 | |

| **OT Preparation (15 credit hours)** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BIO 200 Medical Terminology | 1 | |
| | | BIO 209 Anatomy & Physiology I | 3 | |
| | | BIO 209L Anatomy & Physiology I Lab | 1 | |
| | | BIO 210 Anatomy & Physiology II | 3 | |
| | | BIO 210L Anatomy & Physiology II Lab | 1 | |
| | | EXS 385 Biomechanics | 3 | |
| | | SOC 101 Principles of Sociology | 3 | |
| **Culminating Experience – Community/Clinical (6-9 credit hours)** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BSC 430 Applied Beh Science Seminar *GRADE OF C OR BETTER REQUIRED* | 3 | |
| | | BSC 440 Applied Beh Science Internship | 3-6 | |
| **Masters in Occupational Therapy Required Courses – 4th year (31 credits)** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | OT 503/503L Human Anatomy/Lab | 6 | |
| | | OT 502 Foundations of Occupational Therapy | 3 | |
| | | OT 504 Conditions in Occupational Therapy | 2 | |
| | | OT 506 Task Analysis | 2 | |
| | | OT 602 Occupational Therapy Evaluation and Assessment Skills | 3 | |
| | | OT 604 Psychosocial Aspects of Occupational Performance | 3 | |

| | | | | | |
|---|---|---|---|---|---|
| | | OT 606 | Therapeutic Interventions in Pediatrics | 4 | |
| | | OT 608 | Biomechanics in Occupational Therapy | 3 | |
| | | OT 610 | Neuroscience for the Occupational Therapist | 3 | |
| | | OT 612 | Level I Fieldwork A / Seminar | 2 | |

**Exit Exam Completed (date)**_____

**Credit Hours: 120+ Main Campus**
**Any repeated courses will not be included in the total earned hours.**

- **NEED TO MAINTAIN A GPA OF 3.0 OR HIGHER TO CONTINUE IN THE PROGRAM**
- *** Important Note: 31 credit hours will be counted from the Walsh University Masters in Occupational Therapy Program upon completion of the first two semesters. The B.A. in Psychology Pre-OT will be awarded by Walsh University.**

**ACCOUNTING:** 75 Credit Hours

**Bachelor of Business Administration- Master of Business Administration**

**DeVille School of Business**

2023-2025 Major Curriculum Sheet

**(General Education Core Requirements Listed Separately)*

WALSH UNIVERSITY
EDUCATION FOR LIFE

| **Student:** | **Advisor:** |
|---|---|

| **Business Core Courses:** 48 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 001 | Business Power Skills 1 | 0 | |
| | | BUS 002 | Business Power Skills 2 | 0 | BUS 001 |
| | | BUS 106 | Introduction to Excel | 3 | |
| | | BUS 207 | Financial Accounting | 3 | |
| | | BUS 208 | Managerial Accounting | 3 | BUS 207 |
| | | BUS 209 | Corporate Financial Management | 3 | BUS 207 |
| | | BUS 231 | Business Law | 3 | ENG 102 |
| | | BUS 232 | FD:Business Statistics | 3 | BUS 106 |
| | | BUS 233 | Principles of Marketing | 3 | |
| | | BUS 234 | TH1&CIT:Principles of Management | 3 | |
| | | BUS 350 | Intermediate Excel | 3 | BUS 106 |
| | | BUS 360 | DV:Cross-Cultural Management | 3 | BUS 234 |
| | | BUS 362 | SL:Management Information Systems | 3 | Junior Status |
| | | BUS 364 | Business Analytics | 3 | BUS 232 |
| | | BUS 417 | Operations Management | 3 | Junior Status |
| | | BUS 465 | Strategic Management | 3 | Senior Status |
| | | ECON 203 | FD&DV:Microeconomics | 3 | |
| | | ECON 204 | FD:Macroeconomics | 3 | ECON 203 |
| | | | **Total Business Core Requirements** | 48 | |

| **Management Major Requirements:** 30 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 343 | Accounting and Data Analytics | 3 | BUS 208, BUS 350 |
| | | BUS 371 | Intermediate Accounting I | 3 | BUS 208 |
| | | BUS 372 | Intermediate Accounting II | 3 | BUS 371 |
| | | BUS 373 | Cost Accounting | 3 | BUS 208 |
| | | BUS 385 | Business Experiential Learning/Internships | 3 | Junior Status |
| | | BUS 423 | Federal Tax I, Individual | 3 | BUS 372 |
| | | BUS 424 | Federal Tax II, Entities | 3 | BUS 423 |
| | | BUS 434 | Auditing | 3 | BUS 372 |
| | | BUS 470 | Advanced Accounting I | 3 | BUS 372 |
| | | BUS 471 | Advanced Accounting II | 3 | BUS 470 |
| | | | **Total Management Major Requirements** | 30 | |

| **MBA Courses:** 6 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 521 | (Sustainable Ethical Leadership) | 3 | |
| | | BUS 526 | (Applied Organizational Research & Analysis) | 3 | |
| | | | **Total Electives Requirements** | 6 | |

- **Need 120 credits to graduate**
- **Any repeated courses WILL NOT be included in the total earned hours**
- **A student admitted to BA/MBA Program will be begin MBA coursework in the senior year while competing undergraduate coursework. The MBA courses may be used to satisfy the student's undergraduate elective options. To receive MBA credit for courses, the student must attain a grade of "B-"or higher.**
- **The MBA courses taken during the student's senior year will be included in the student's normal undergraduate tuition fee structure. After completing the Bachelor's degree, the student is eligible to receive the Walsh University 25% tuition discount on all future coursework completed at the University.**
- **Total of 120 hours required – above, General Education, etc., in order to graduate.**
- **Any repeated courses will not be included in the total earned hours.**
- Accounting majors must earn "C" or better in accounting courses to advance to major requirements
- **Need a GPA 2.5 in order to graduate**

**Digital Marketing & Analytics:** 75 Credit Hours
**Bachelor of Business Administration**
**–Master of Business Administration**
**DeVille School of Business**
2023-2025 Major Curriculum Sheet

WALSH UNIVERSITY
EDUCATION FOR LIFE

| **Student:** | **Advisor:** |
|---|---|

| **Business Core Courses:** 48 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 001 Business Power Skills 1 | 0 | |
| | | BUS 002 Business Power Skills 2 | 0 | BUS 001 |
| | | BUS 106 Introduction to Excel | 3 | |
| | | BUS 207 Financial Accounting | 3 | |
| | | BUS 208 Managerial Accounting | 3 | BUS 207 |
| | | BUS 209 Corporate Financial Management | 3 | BUS 207 |
| | | BUS 231 Business Law | 3 | ENG 102 |
| | | BUS 232 FD: Business Statistics | 3 | BUS 106 |
| | | BUS 233 Principles of Marketing | 3 | |
| | | BUS 234 TH1&CIT:Principles of Management | 3 | |
| | | BUS 350 Intermediate Excel | 3 | BUS 106 |
| | | BUS 360 DV: Cross-Cultural Management | 3 | BUS 234 |
| | | BUS 362 SL: Management Information Systems | 3 | Junior Status |
| | | BUS 364 Business Analytics | 3 | BUS 232 |
| | | BUS 417 Operations Management | 3 | Junior Status |
| | | BUS 465 Strategic Management | 3 | Senior Status |
| | | ECON 203 FD&DV: Microeconomics | 3 | |
| | | ECON 204 FD: Macroeconomics | 3 | ECON 203 |
| | | **Total Business Core Requirements** | 48 | |

| **Digital Marketing & Analytics Major Requirements:** 27 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 309 DV: Consumer Behavior | 3 | BUS 233 |
| | | BUS 311 SL: Marketing Research | 3 | BUS 309, BUS 232 |
| | | BUS 385 Business Experiential Learning/Internships | 3 | Junior Status |
| | | BUS 416 DM: Marketing Strategy | 3 | BUS 309 |
| | | BUS 426 Sales Management | 3 | BUS 233 |
| | | BUS 430 Digital Marketing (Previously Social Media) | 3 | BUS 233 |
| | | BUS 436 Marketing Analytics | 3 | BUS 311, BUS 350 |
| | | COM 175 Digital Creativity Applications | 3 | |
| | | GD/COM 295 Graphic Design | 3 | |
| | | **Total Major Requirements** | 27 | |

| **MBA Courses:** 6 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 521 (Sustainable Ethical Leadership) | 3 | |
| | | BUS 522 (Organizational Behavior & Communication) | 3 | |
| | | **Total Electives Requirements** | 6 | |

- **Need 120 credits to graduate**
- **Any repeated courses <u>WILL NOT</u> be included in the total earned hours**

- **A student admitted to BA/MBA Program will be begin MBA coursework in the senior year while competing undergraduate coursework. The MBA courses may be used to satisfy the student's undergraduate elective options. To receive MBA credit for courses, the student must attain a grade of "B-"or higher.**
- **The MBA courses taken during the student's senior year will be included in the student's normal undergraduate tuition fee structure. After completing the Bachelor's degree, the student is eligible to receive the Walsh University 25% tuition discount on all future coursework completed at the University.**

***Need a GPA 2.5 in order to graduate with undergraduate degree**

**Finance:** 75 Credit Hours
**Bachelor of Business Administration-**
**Master of Business Administration**
**DeVille School of Business**
2023-2025 Major Curriculum Sheet

WALSH UNIVERSITY
EDUCATION FOR LIFE

| **Student:** | **Advisor:** |
|---|---|
| | |

| **Business Core Courses:** 48 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 001 | Business Power Skills 1 | 0 | |
| | | BUS 002 | Business Power Skills 2 | 0 | BUS 001 |
| | | BUS 106 | Introduction to Excel | 3 | |
| | | BUS 207 | Financial Accounting | 3 | |
| | | BUS 208 | Managerial Accounting | 3 | BUS 207 |
| | | BUS 209 | Corporate Financial Management | 3 | BUS 207 |
| | | BUS 231 | Business Law | 3 | ENG 102 |
| | | BUS 232 | FD: Business Statistics | 3 | BUS 106 |
| | | BUS 233 | Principles of Marketing | 3 | |
| | | BUS 234 | TH1&CIT:Principles of Management | 3 | |
| | | BUS 350 | Intermediate Excel | 3 | BUS 106 |
| | | BUS 360 | DV: Cross-Cultural Management | 3 | BUS 234 |
| | | BUS 362 | SL: Management Information Systems | 3 | Junior Status |
| | | BUS 364 | Business Analytics | 3 | BUS 232 |
| | | BUS 417 | Operations Management | 3 | Junior Status |
| | | BUS 465 | Strategic Management | 3 | Senior Status |
| | | ECON 203 FD&DV: Microeconomics | | 3 | |
| | | ECON 204 FD: Macroeconomics | | 3 | ECON 203 |
| | | | **Total Business Core Requirements** | 48 | |

| **Digital Marketing & Analytics Major Requirements:** 27 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 351 | International Finance | 3 | BUS 209 |
| | | BUS 385 | Business Experiential Learning/Internships | 3 | Junior Status |
| | | BUS 451 | Seminar in Investments | 3 | BUS 209, BUS 350 |
| | | BUS 452 | Corporate Financial Management II | 3 | BUS 209, BUS 350 |
| | | BUS 453 | Financial Statement Analysis & Valuation | 3 | BUS 452 |
| | | BUS 457 | Advanced Portfolio Management | 3 | BUS 451, BUS 452 |
| | | ECON 312 | Money, Banking, and Monetary Policy | 3 | ECON 204 |
| **Elective: Choose Two** 6 Credit Hours | | | | | |
| | | BUS 371 | Intermediate Accounting | 3 | BUS 208 |
| | | BUS 419 | Supply Chain Management | 3 | BUS 417 |
| | | BUS 426 | Sales Management | 3 | BUS 233 |
| | | BUS 456 | Mergers & Acquisitions | 3 | BUS 209, BUS 350 |
| | | | **Total Major Requirements** | 27 | |

| **MBA Courses:** 6 Credit Hours | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BUS 521 | (Sustainable Ethical Leadership) | 3 | |
| | | BUS 526 | (Applied Organizational Research & Analysis) | 3 | |
| | | | **Total Electives Requirements** | 6 | |

- **Need 120 credits to graduate**

- **Any repeated courses WILL NOT be included in the total earned hours**
  - **A student admitted to BA/MBA Program will be begin MBA coursework in the senior year while competing undergraduate coursework. The MBA courses may be used to satisfy the student's undergraduate elective options. To receive MBA credit for courses, the student must attain a grade of "B-"or higher.**
  - **The MBA courses taken during the student's senior year will be included in the student's normal undergraduate tuition fee structure. After completing the Bachelor's degree, the student is eligible to receive the Walsh University 25% tuition discount on all future coursework completed at the University.**
  - **Total of 120 hours required – above, General Education, etc., in order to graduate.**
  - **Any repeated courses will not be included in the total earned hours.**
  - Accounting majors must earn "C" or better in accounting courses to advance to major requirements
  - **Need a GPA 2.5 in order to graduate with undergraduate degree**

**MANAGEMENT:** 75 Credit Hours

**Bachelor of Business Administration/Master of Business Administration**

**DeVille School of Business**

2023-2025 Major Curriculum Sheet

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

*Two boxes appear before each course listing. The first box is for the semester when the course was taken. The second box is for the final grade received in that course. (Example: [F-YR] [B+] indicates the course was completed in the fall semester of current year with a grade of B+.)*

| **Business Core Courses:** 48 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 001 Business Power Skills 1 | 0 | |
| | | BUS 002 Business Power Skills 2 | 0 | BUS 001 |
| | | BUS 106 Introduction to Excel | 3 | |
| | | BUS 207 Financial Accounting | 3 | |
| | | BUS 208 Managerial Accounting | 3 | BUS 207 |
| | | BUS 209 Corporate Financial Management | 3 | BUS 207 |
| | | BUS 231 Business Law | 3 | ENG 102 |
| | | BUS 232 FD:Business Statistics | 3 | BUS 106 |
| | | BUS 233 Principles of Marketing | 3 | |
| | | BUS 234 TH1&CIT:Principles of Management | 3 | |
| | | BUS 350 Intermediate Excel | 3 | BUS 106 |
| | | BUS 360 DV:Cross-Cultural Management | 3 | BUS 234 |
| | | BUS 362 SL:Management Information Systems | 3 | Junior Status |
| | | BUS 364 Business Analytics | 3 | BUS 232 |
| | | BUS 417 Operations Management | 3 | Junior Status |
| | | BUS 465 Strategic Management | 3 | Senior Status |
| | | ECON 203 FD&DV:Microeconomics | 3 | |
| | | ECON 204 FD:Macroeconomics | 3 | ECON 203 |
| | | **Total Business Core Requirements** | 48 | |

| **Management Major Requirements:** 21 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 318 DV:Human Resource Foundations | 3 | |
| | | BUS 361 Project Management | 3 | |
| | | BUS 383 Creativity and Design Thinking | 3 | |
| | | BUS 385 Business Experiential Learning/Internships | 3 | |
| | | BUS 418 Leadership | 3 | BUS 360 |
| | | BUS 419 Supply Chain Management | 3 | BUS 417 |
| | | BUS 448 Systems and Sustainability | 3 | BUS 360 |
| | | **Total Management Major Requirements** | 21 | |

| **Electives:** 6 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 339 Facilities and Event Management | 3 | BUS 225 |
| | | BUS 426 Sales Management | 3 | BUS 233 |
| | | ECON 301 DV:Global Economic Perspectives | 3 | ECON 204 |
| | | ECON 320 International Trade and Finance | 3 | ECON 204 |
| | | **Total Electives Requirements** | 6 | |

| **MBA Courses:** 6 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BUS 524 (Marketing) | 3 | |
| | | BUS 526 (Applied Organizational Research & Analysis) | 3 | |
| | | **Total Electives Requirements** | 6 | |

- **Need 120 credits to graduate**
- **Any repeated courses <u>WILL NOT</u> be included in the total earned hours**
- **A student admitted to BA/MBA Program will be begin MBA coursework in the senior year while competing undergraduate coursework. The MBA courses may be used to satisfy the student's undergraduate elective options. <u>To receive MBA credit for courses, the student must attain a grade of "B-"or higher</u>.**
- **The MBA courses taken during the student's senior year will be included in the student's normal undergraduate tuition fee structure. After completing the Bachelor's degree, the student is eligible to receive the Walsh University 25% tuition discount on all future coursework completed at the University.**

# Exercise Science–Pre-Athletic Training 3+2 EA: 69 Credit Hours

**Bachelor of Science**
**Division of Math & Science**
2023-2025 Major Curriculum Sheet
Main Campus Requirements
**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

| **Biology Requirements: 14 Credit Hours** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BIO 101 Principles of Biology I | 3 | |
| | | BIO 101L Principles of Biology I Lab | 1 | |
| | | BIO 200 Medical Terminology | 2 | |
| | | BIO 209 Anatomy & Physiology I | 3 | |
| | | BIO 209L Anatomy & Physiology I Lab | 1 | |
| | | BIO 210 Anatomy & Physiology II | 3 | |
| | | BIO 210L Anatomy & Physiology II Lab | 1 | |
| **Chemistry Requirements: 4 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I Lab | 1 | |
| **Exercise Science Requirements: 32 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | EXS 101 Exercise Physiology I | 3 | |
| | | EXS 102 Exercise Physiology II | 3 | |
| | | EXS 150 First Aid and CPR | 2 | |
| | | EXS 225 Strength Training and Conditioning | 3 | |
| | | EXS 300 Exercise Testing and Prescription | 3 | |
| | | EXS 362 Prevention & Care of Athletic Injuries | 3 | |
| | | EXS 363 Advanced Athletic Injury Management | 3 | |
| | | EXS 375 Research Design and Elementary Statistics | 3 | |
| | | EXS 385 Biomechanics | 3 | |
| | | EXS 484 Pathophysiology of Chronic Disease | 3 | |
| | | EXS 485 SL: Exercise Management of Chronic Disease | 2 | |
| | | EXS 498 Research Seminar | 1 | |
| **Other Requirements: 19 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | **EXS 315** Exercise and Sports Nutrition OR **NS 207** Nutrition | 3 | |
| | | MATH 155 Elementary Functions I (required for PHYS 101) | 3 | |
| | | MATH 156 Elementary Functions II (required for PHYS 101) | 3 | |
| | | MATH 221 Statistics | 3 | |
| | | PHYS 101 Physics I Lecture | 3 | |
| | | PHYS 101L Physics I Lab | 1 | |
| | | PSYC 120 Principles of Psychology | 3 | |
| **Athletic Training Requirements (4th year) at Youngstown State University: 25 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MAT 6903 Functions of Athletic Training Clinical Practice | 3 | |

| | | | | | |
|---|---|---|---|---|---|
| | | MAT 6908 | Functional Human Gross Anatomy | 4 | |
| | | MAT 6901 | Emergency & Acute Care | 3 | |
| | | MAT 6902 | Foundations of Therapeutic Interventions | 3 | |
| | | MAT 6915 | Evaluation & Management of Lower Extremity Injuries | 4 | |
| | | MAT 6916 | Therapeutic Interventions | 3 | |
| | | MAT 6910 | Clinical Practice | 2 | |
| | | MAT 6946 | General Medical Conditions Evaluation and Care | 3 | |

**Credit Hours: 120+ Main Campus**
**Any repeated courses will not be included in the total earned hours.**

Exercise Science–Pre-Occupational Therapy 3+2 EA: 52 Credit Hour

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

| **Exercise Science Requirements: 27 Credit Hours** | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | EXS 101 Exercise Physiology I | 3 | |
| | | EXS 102 Exercise Physiology II | 3 | |
| | | EXS 225 Strength Training and Conditioning | 3 | |
| | | EXS 263 Personal and Community Health (H1:TH1:DV:CIT) | 3 | |
| | | EXS 300 Exercise Testing and Prescription | 3 | |
| | | EXS 375 Research Design and Elementary Statistics | 3 | |
| | | EXS 385 DM: Biomechanics | 3 | |
| | | EXS 484 Pathophysiology of Chronic Disease | 3 | |
| | | EXS 485 SL: Exercise Management of Chronic Disease | 2 | |
| | | EXS 498 Research Seminar | 1 | |
| **Other Requirements: 25 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PSYC 120 Principles of Psychology | 3 | |
| | | PSYC 210 Human Development Across the Lifespan | 3 | |
| | | PSYC 401 Abnormal Psychology | 3 | |
| | | SOC 101 Principles of Sociology | 3 | |
| | | BIO 200 Medical Terminology | 1 | |
| | | BIO 209 Anatomy and Physiology I | 3 | |
| | | BIO 209L Anatomy and Physiology I Lab | 1 | |
| | | BIO 210 Anatomy and Physiology II | 3 | |
| | | BIO 210L Anatomy and Physiology II Lab | 1 | |
| | | BIO 309 Human Physiology | 3 | |
| **Occupational Therapy Requirements (4th Year): 30 Credit Hours** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | OT 503/503L Human Anatomy/Lab | 5 | |
| | | OT 502 Foundations of Occupational Therapy | 3 | |
| | | OT 504 Conditions in Occupational Therapy | 2 | |
| | | OT 506 Task Analysis | 2 | |
| | | OT 602 Occupational Therapy Evaluation and Assessment | 2 | |
| | | OT 604 Psychosocial Aspects of Occupational Performance | 3 | |
| | | OT 606 Therapeutic Interventions in Pediatrics | 3 | |
| | | OT 608 Biomechanics in Occupational Therapy | 4 | |
| | | OT 610 Neuroscience for the Occupational Therapist | 3 | |
| | | OT 612 Level I Fieldwork A / Seminar | 2 | |

**Credit Hours: 120+ Main Campus**

**Any repeated courses will not be included in the total earned hours.**

# Exercise Science–Pre-Physical Therapy 3+3 EA: 74 Credit Hours

**Bachelor of Science**
**Division of Math & Science**
2023-2025 Major Curriculum Sheet
Main Campus Requirements
**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

| **Exercise Science Requirements: 29 Credit Hours** | | | | | |
|---|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | EXS 101 | Exercise Physiology I | 3 | |
| | | EXS 102 | Exercise Physiology II | 3 | |
| | | EXS 150 | First Aid and CPR | 2 | |
| | | EXS 225 | Strength Training and Conditioning | 3 | |
| | | EXS 300 | Exercise Testing and Prescription | 3 | |
| | | EXS 375 | Research Design and Elementary Statistics | 3 | |
| | | EXS 385 | DM: Biomechanics | 3 | |
| | | EXS 484 | Pathophysiology of Chronic Disease | 3 | |
| | | EXS 485 | SL: Exercise Management of Chronic Disease | 2 | |
| | | EXS 494 | Internship | 3 | |
| | | EXS 498 | Research Seminar | 1 | |
| **Other Requirements: 45 Credit Hours** | | | | | |
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | BIO 101 | Principles of Biology I | 3 | |
| | | BIO 101L | Principles of Biology I Lab | 1 | |
| | | BIO 102 | Principles of Biology II | 3 | |
| | | BIO 102L | Principles of Biology II Lab | 1 | |
| | | BIO 209 | Anatomy & Physiology | 3 | |
| | | BIO 209L | Anatomy and Physiology I Lab | 1 | |
| | | BIO 210 | Anatomy and Physiology II | 3 | |
| | | BIO 210L | Anatomy and Physiology II Lab | 1 | |
| | | BIO 309 | Human Physiology | 3 | |
| | | CHEM 101 | Principles of Chemistry I | 3 | |
| | | CHEM 101L | Principles of Chemistry I Lab | 1 | |
| | | CHEM 102 | Principles of Chemistry II | 3 | |
| | | CHEM 102L | Principles of Chemistry II Lab | 1 | |
| | | PSYC 210 | Human Development | 3 | |
| | | MATH 155 | Elementary Functions I (required for PHYS 101) | 3 | |
| | | MATH 156 | Elementary Functions II (required for PHYS 101) | 3 | |
| | | PHYS 101 | Physics I Lecture | 3 | |
| | | PHYS 101L | Physics I Lab | 1 | |
| | | PHYS 102 | Physics II Lecture | 3 | |
| | | PHYS 102L | Physics II Lab | 1 | |
| **Physical Therapy Requirements (4th year): 20 Credit Hours** | | | | | |
| Semester Taken | Final Grade | Course Name | | Credit Hours | Prerequisite |
| | | **PT 503/603** | **Human Anatomy** | 5 | |
| | | **PT 504/604** | **Foundations of Neuroscience** | 4 | |
| | | **PT 506/606** | **Foundations of Pharmacology** | 2 | |
| | | **PT 511/611** | **Foundations of Clinical Science** | 4 | |

| | | | | |
|---|---|---|---|---|
| | | **PT 515/615 Foundations of Biomechanics** | 5 | |

**Credit Hours: 120+ Main Campus**
**Any repeated courses will not be included in the total earned hours.**

Pre-Engineering (Bioengineering–UD) 3+2: **67** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Bioengineering (Biology Major with a Math Minor)***

| **Biology Requirements:** 24 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BIO 101 Principles of Biology I | 3 | |
| | | BIO 101L Principles of Biology I: Lab | 1 | |
| | | BIO 102 Principles of Biology II | 3 | |
| | | BIO 102L Principles of Biology II: Lab | 1 | |
| | | BIO 120 Introduction to Bioinformatics | 3 | |
| | | BIO 206 Microbiology | 3 | |
| | | BIO 206L Microbiology: Lab | 1 | |
| | | BIO 306 Cell Biology | 3 | |
| | | BIO 307 Essential Biochemistry (counts as CHM 420 at UD) | 3 | |
| | | BIO 410 Cellular & Molecular Techniques (counts as BIE 507 at UD) | 3 | |

| **Chemistry Requirements:** 16 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I: Lab | 1 | |
| | | CHEM 102 Principles of Chemistry II | 3 | |
| | | CHEM 102L Principles of Chemistry II: Lab | 1 | |
| | | CHEM 201 Organic Chemistry I | 3 | |
| | | CHEM 201L Organic Chemistry I: Lab | 1 | |
| | | CHEM 202 Organic Chemistry II | 3 | |
| | | CHEM 202L Organic Chemistry II: Lab | 1 | |

| **Physics Requirements: 8** Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |

| **Mathematics (Minor) Requirements:** 18 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I | 3 | |
| | | MATH 211A Calculus II | 3 | |
| | | MATH 221 Statistics | 3 | |
| | | MATH 310 Calculus III | 3 | |
| | | MATH 311 Calculus IV | 3 | |
| | | MATH 410Elem Differential Equations | 3 | |

**Additional Requirements: see the next sheet which includes courses at University of Dayton**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 207.**

# UNIVERISTY OF DAYTON COURSES: Proposed Curriculum

| Bioengineering (Year 4 at University of Dayton) | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours |
| | | BIO 390 | Biology Internship (during summer after year 3 at UD) | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| | | BIE 501 | Introduction to Bioengineering (graduate) | 3 |
| | | BIE 505 | Principles of Engineering for Bioengineers (graduate) | 3 |
| | | BIE 561 | Biomedical Engineering I (graduate) | 3 |
| | | BIE 597 | Research Methods | 3 |
| | | BIE XXX | Select Course from Emphasis Area (7 choices) | 3 |
| | | CME 582 | Advanced Chemical Engineering Calculations II | 3 |
| | | EGR 202 | Introduction to Thermodynamics | 3 |
| | | MTH 527 | Biostatistics | 3 |
| **Total for Summer, Fall and Spring of Year 4** | | | | **42** |

**University of Dayton Information:**

Year 4 at the University of Dayton may start with courses in summer following the Walsh junior year. The summer, fall and spring of year 4 will be at the University of Dayton. Total credits at UD, including summer, fall and spring for year 4 will be 25 credit hours of engineering courses.

The first 3 years at Walsh will include the first page of this curriculum sheet as well as the majority of the general education curriculum. It may require some summer courses to complete this major in the 3 + 2 window. Check with your advisor for details.

At the end of the spring semester in year 4, the BS in Biology from Walsh will have been earned and you will graduate from Walsh. You will then need to apply to the UD Master's program (see advisor for details) to complete the 5th year at UD. Once accepted into the UD Master's program, you will complete summer, fall and spring courses at UD (and thesis work if chosen) to finish an MS in Bioengineering from UD in the spring of year 5.

During year 4, the Walsh pre-engineering student will have both a Walsh and a UD advisor. Special considerations will be made to work with athletes and honors students.

The exact courses involved in this program are subject to change between 2017-2020 as we optimize this new process. All changes will benefit students enrolled.

***Credit Hours: 120+ Main Campus**

**Any repeated courses will not be included in the total earned hours.**

Pre-Engineering (Biomedical – UA) 3+2: **66** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Biomedical (Biology Major with a Math Minor)***

| **Biology Requirements:** 24 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | BIO 101 Principles of Biology I | 3 | |
| | | BIO 101L Principles of Biology I: Lab | 1 | |
| | | BIO 102 Principles of Biology II | 3 | |
| | | BIO 102L Principles of Biology II: Lab | 1 | |
| | | BIO 120 Introduction to Bioinformatics | 3 | |
| | | BIO 206 Microbiology | 3 | |
| | | BIO 206L Microbiology: Lab | 1 | |
| | | BIO 306 Cell Biology | 3 | |
| | | BIO 307 Essential Biochemistry | 3 | |
| | | BIO 410 Cellular & Molecular Techniques | 3 | |
| **Chemistry Requirements:** 16 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I: Lab | 1 | |
| | | CHEM 102 Principles of Chemistry II | 3 | |
| | | CHEM 102L Principles of Chemistry II: Lab | 1 | |
| | | CHEM 201 Organic Chemistry I | 3 | |
| | | CHEM 201L Organic Chemistry I: Lab | 1 | |
| | | CHEM 202 Organic Chemistry II | 3 | |
| | | CHEM 202L Organic Chemistry II: Lab | 1 | |
| **Physics Requirements: 8** Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |
| **Mathematics Requirements:** 18 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I *fulfill score and program requirements | | |
| | | MATH 211A Calculus II | | |
| | | MATH 221 Statistics | | |
| | | MATH 310 Calculus III | | |
| | | MATH 311 Calculus IV | | |
| | | MATH 410Elem Differential Equations | | |

**Additional Requirements:**
***See the next sheet which includes courses at University of Akron**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 210.**
***Internship completed at either Walsh University or University of Akron, 1-3 credits**

## UNIVERISTY OF AKRON COURSES:

| Fall 2nd Year | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | 4300:201 Staics | 3 | |
| **Spring 2nd Year** | | | | |
| | | 3450:335 Differential Equations at Walsh | 3 | |
| | | 4600:203 Dynamics | 3 | |
| **Fall 3rd Year** | | | | |
| | | 4300:202 Mechanics of Solids | 3 | |
| **Spring 3rd Year** | | | | |
| | | 4800:400 Biomaterials | 3 | |
| **Fall 4th Year** | | | | |
| | | 4800:362 Transport Fundamentals for BME | 3 | |
| | | 4400:307 Basic Electrical Engineering | 4 | |
| | | BME Electives | 6 | |
| **Spring 4th Year** | | | | |
| | | 4600:300 Thermodynamics I at UA | 3 | |
| | | BME Electives | 3 | |
| | | BME Electives | 3 | |
| | | Engineering Electives | 3 | |

| Fall 5th Year (Thesis Option) | | | |
|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours |
| | | 4800:605 Fundamentals of Biomedical Engineering | 4 |
| | | 4800:606 Physiology for Biomedical Science and Engineering | 3 |
| | | 4800:600 BME Graduate Colloquium | 1 |
| | | 4800:699 Master's Thesis | 3 |
| **Spring 5th Year (Thesis Option)** | | | |
| | | 4800:611 Biometry | 3 |
| | | 4800:699 Master's Thesis | 3 |
| | | Approved Electives | 4 |
| | | | |

| Fall 5th Year (Non-Thesis Option) | | | |
|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours |
| | | 4800:605 Fundamentals of Biomedical Engineering | 4 |
| | | 4800:606 Physiology for Biomedical Science and Engineering | 3 |
| | | 4800:600 BME Graduate Colloquium | 1 |
| | | Approved Electives | 3 |
| **Spring 5th Year (Non-Thesis Option)** | | | |
| | | 4800:611 Biometry | 3 |
| | | Approved Math/Science | 3 |
| | | Approved Electives | 4 |
| | | Engineering Report | 2 |

UA Contact: Dr. Yang Hyun Yun – yy@uakron.edu

Pre-Engineering (Chemical Engineering–UD) 3+2: **66** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Chemical Engineering (Chemistry Major with a Math Minor)***

| **Chemistry Requirements:** 39 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I: Lab | 1 | |
| | | CHEM 102 Principles of Chemistry II | 3 | |
| | | CHEM 102L Principles of Chemistry II: Lab | 1 | |
| | | CHEM 198 Chemistry Careers Seminar IA | .5 | |
| | | CHEM 199 Chemistry Careers Seminar IB | .5 | |
| | | CHEM 201 Organic Chemistry I | 3 | |
| | | CHEM 201L Organic Chemistry I: Lab | 1 | |
| | | CHEM 202 Organic Chemistry II | 3 | |
| | | CHEM 202L Organic Chemistry II: Lab | 1 | |
| | | CHEM 298 Chemistry Seminar IIA | .5 | |
| | | CHEM 299 Chemistry Seminar IIB | .5 | |
| | | CHEM 303 Modern Analytical Chem | 3 | |
| | | CHEM 303L Modern Analytical Chem Lab | 1 | |
| | | CHEM 305 Inorganic Chemistry | 3 | |
| | | CHEM 310 Found of Physical Chem | 4 | |
| | | CHEM 415 Integrated Lab Experience I | 2 | |
| | | CHEM 416 Integrated Lab Experience II | 2 | |
| | | CHEM 450 Environmental Chemistry | 3 | |
| | | CHEM 470 Fuel Chemistry | 3 | |
| **Physics Requirements: 8** Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |
| **Mathematics (Minor) Requirements:** 18 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I | 3 | |
| | | MATH 211A Calculus II | 3 | |
| | | MATH 221 Statistics | 3 | |
| | | MATH 310 Calculus III | 3 | |
| | | MATH 311 Calculus IV | 3 | |
| | | MATH 410Elem Differential Equations | 3 | |

**Additional Requirements: see the next sheet which includes courses at University of Dayton**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 207.**

# UNIVERISTY OF DAYTON COURSES: Proposed Curriculum

| Chemical Engineering (Year 4 at University of Dayton) | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours |
| | | CME 203 | Material and Energy Balances | 3 |
| | | CME 306 | Chemical Reaction Kinetics and Engineering | 3 |
| | | CME 311 | Chemical Engineering Thermodynamics | 3 |
| | | CME 324 | Transport Phenomena I | 3 |
| | | CME 365 | Separation Processes | 3 |
| | | CME 381 | Advanced Computations for Chemical Engineers | 3 |
| | | CHEM 390 | Chemistry Internship (summer after Walsh preferred) | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| | | CME 507 | Advanced Thermodynamics | 3 |
| | | CME 581 | Advanced Chemical Engineering Calculations | 3 |
| **Total for Summer, Fall and Spring of Year 4** | | | | **33** |

## University of Dayton Information:

Year 4 at the University of Dayton may start with courses in summer following the Walsh junior year. The summer, fall and spring of year 4 will be at the University of Dayton. Total credits at UD, including summer, fall and spring for year 4 will be 27 credit hours of engineering courses.

The first 3 years at Walsh will include the first page of this curriculum sheet as well as the majority of the general education curriculum. It may require some summer courses to complete this major in the 3 + 2 window. Check with your advisor for details.

At the end of the spring semester in year 4, the BS in Chemistry from Walsh will have been earned and you will graduate from Walsh. You will then need to apply to the UD Master's program (see advisor for details) to complete the 5th year at UD. Once accepted into the UD Master's program, you will complete summer, fall and spring courses at UD (and thesis work if chosen) to finish an MS in Chemical Engineering from UD in the spring of year 5.

During year 4, the Walsh pre-engineering student will have both a Walsh and a UD advisor. Special considerations will be made to work with athletes and honors students.

The exact courses involved in this program are subject to change between 2017-2020 as we optimize this new process. All changes will benefit students enrolled.

***Credit Hours: 120+ Main Campus**

**Any repeated courses will not be included in the total earned hours.**

Pre-Engineering (Chemistry– UA) 3+2: **65** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Chemical Engineering (Chemistry Major with a Math Minor)***

| **Chemistry Requirements:** 39 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I: Lab | 1 | |
| | | CHEM 102 Principles of Chemistry II | 3 | |
| | | CHEM 102L Principles of Chemistry II: Lab | 1 | |
| | | CHEM 198 Chemistry Careers Seminar IA | .5 | |
| | | CHEM 199 Chemistry Careers Seminar IB | .5 | |
| | | CHEM 201 Organic Chemistry I | 3 | |
| | | CHEM 201L Organic Chemistry I: Lab | 1 | |
| | | CHEM 202 Organic Chemistry II | 3 | |
| | | CHEM 202L Organic Chemistry II: Lab | 1 | |
| | | CHEM 298 Chemistry Seminar IIA | .5 | |
| | | CHEM 299 Chemistry Seminar IIB | .5 | |
| | | CHEM 303 Modern Analytical Chem | 3 | |
| | | CHEM 303L Modern Analytical Chem Lab | 1 | |
| | | CHEM 305 Inorganic Chemistry | 3 | |
| | | CHEM 310 Found of Physical Chem | 4 | |
| | | CHEM 415 Integrated Lab Experience I | 2 | |
| | | CHEM 416 Integrated Lab Experience II | 2 | |
| | | CHEM 450 Environmental Chemistry | 3 | |
| | | CHEM 470 Fuel Chemistry | 3 | |
| **Physics Requirements: 8** Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |
| **Mathematics (Minor) Requirements:** 18 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I | | |
| | | MATH 211A Calculus II | | |
| | | MATH 221 Statistics | | |
| | | MATH 310 Calculus III | | |
| | | MATH 311 Calculus IV | | |
| | | MATH 410Elem Differential Equations | | |

**Additional Requirements:**
***See the next sheet which includes courses at University of Akron**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 210.**
***Internship completed at either Walsh University or University of Akron, 1-3 credits**

## UNIVERISTY OF AKRON COURSES: Proposed Curriculum

| Fall 4th Year – 12 credits | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | 4200:200 Materials Energy Balance (UG) | 3 | |
| | | 4200:321 Transport Phenomena (UG) | 3 | |
| | | XXXX:XXX Approved Elective (GR) | 3 | |
| | | 4200:6XX Chemical Engineering Electives (GR) | 3 | |
| **Spring 4th Year – 13 credits** | | | | |
| | | 4200:225 Thermodynamics I (UG) | 4 | |
| | | 4200:330 Chemical Reaction Engineering (UG) | 3 | |
| | | 4200:360 ChE Lab (UG) | 3 | |
| | | 4200:6XX Chemical Engineering Electives (GR) | 3 | |
| **Summer 4th Year – 3 credits** | | | | |
| | | XXXX:XXX ChE Report (GR) | 3 | |
| **Fall 5th Year – 12 credits** | | | | |
| | | 4200:610 Classical Thermodynamics (GR) | 3 | |
| | | 4200:605 Chemical Reaction Engineering (GR) | 3 | |
| | | 4200:631 Chemical Engineering Analysis (GR) | 3 | |
| | | XXXX:XXX Approved Elective (GR) | 3 | |
| **Spring 5th Year – 12 credits** | | | | |
| | | 4200:600 Transport Phenomena (GR) | 3 | |
| | | XXXX:XXX Approved Elective (GR) | 9 | |

Pre-Engineering (Computer Engineering–UD) 3+2: **62** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Computer Engineering (Computer Programming Major with a Math Minor)***

| **Computer Science Requirements:** 35 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CS 108 Foundations of Computer Science I | 3 | |
| | | CS 109 Foundations of Computer Science II | 3 | |
| | | CS 111 Intro to Object Oriented Programming I | 3 | |
| | | CS 112 Introduction to Networking | 3 | |
| | | CS 212 Introduction Object Oriented Programming II | 3 | |
| | | CS 220 Discrete Patterns for Comp Science | 3 | |
| | | CS 221 Database Techniques | 3 | |
| | | CS 298 Computer Science Career Seminar | 1 | |
| | | CS 306 Computer Organization | 3 | |
| | | CS 114 Introduction to Cybersecurity | 3 | |
| | | CS 425 Software Engineering I | 3 | |
| | | CS 426 Software Engineering II | 3 | |
| | | CS 498 Computer Science Career Seminar II | 1 | |
| **Physics Requirements: 8** Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |
| **Mathematics (Minor) Requirements:** 18 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I | 3 | |
| | | MATH 211A Calculus II | 3 | |
| | | MATH 221 Statistics | 3 | |
| | | MATH 310 Calculus III | 3 | |
| | | MATH 311 Calculus IV | 3 | |
| | | MATH 410Elem Differential Equations | 3 | |

**Additional Requirements: see the next sheet which includes courses at University of Dayton**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 207.**

# UNIVERISTY OF DAYTON COURSES: Proposed Curriculum

| Computer Engineering (Year 4 at University of Dayton) | | | |
|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours |
| | | ECE 201 Circuit Analysis | 3 |
| | | ECE 201L Circuit Analysis Lab | 1 |
| | | ECE 203 Introduction to MatLab | 1 |
| | | ECE 215 Introduction to Digital Systems | 3 |
| | | ECE 215L Digital Systems Lab | 1 |
| | | ECE 303 Signals an Systems | 3 |
| | | ECE 334 Discrete Signals and Systems | 3 |
| | | ECE 340 Engineering Probability and Random Process | 3 |
| | | CS 385 Computer Engineering Internship (summer after Walsh preferred) | 3 |
| | | ECE 501 Contemporary Digital Design | 3 |
| | | CPS Core Course or Course from Concentration | 3 |
| | | ECE 532 Embedded Systems | 3 |
| | | CPS Core or Course from Concentration | 3 |
| | | Course from Concentration | 3 |
| | | General Education Course Counting for Walsh | 3 |
| | | General Education Course Counting for Walsh | 3 |
| **Total for Summer, Fall and Spring of Year 4** | | | **42** |

## University of Dayton Information:

Year 4 at the University of Dayton may start with courses in summer following the Walsh junior year. The summer, fall and spring of year 4 will be at the University of Dayton. Total credits at UD, including summer, fall and spring for year 4 will be 27 credit hours of engineering courses.

The first 3 years at Walsh will include the first page of this curriculum sheet as well as the majority of the general education curriculum. It may require some summer courses to complete this major in the 3 + 2 window. Check with your advisor for details.

At the end of the spring semester in year 4, the BS in Computer Science from Walsh will have been earned and you will graduate from Walsh. You will then need to apply to the UD Master's program (see advisor for details) to complete the 5th year at UD. Once accepted into the UD Master's program, you will complete summer, fall and spring courses at UD (and thesis work if chosen) to finish an MS in Computer Engineering from UD in the spring of year 5.

During year 4, the Walsh pre-engineering student will have both a Walsh and a UD advisor. Special considerations will be made to work with athletes and honors students.

The exact courses involved in this program are subject to change between 2017-2020 as we optimize this new process. All changes will benefit students enrolled.

***Credit Hours: 120+ Main Campus**

**Any repeated courses will not be included in the total earned hours.**

Pre-Engineering (Materials Engineering–UD) 3+2: **65** Credit Hours

**Bachelor of Science**

**Division of Math & Science**

2023-2025 Major Curriculum Sheet

Main Campus Requirements

**(General Education Core Requirements Listed Separately)*

| **Student:** | **Advisor:** |
|---|---|

***Chemical Engineering (Chemistry Major with a Math Minor)***

| **Chemistry Requirements:** 39 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 101 Principles of Chemistry I | 3 | |
| | | CHEM 101L Principles of Chemistry I: Lab | 1 | |
| | | CHEM 102 Principles of Chemistry II | 3 | |
| | | CHEM 102L Principles of Chemistry II: Lab | 1 | |
| | | CHEM 198 Chemistry Careers Seminar IA | .5 | |
| | | CHEM 199 Chemistry Careers Seminar IB | .5 | |
| | | CHEM 201 Organic Chemistry I | 3 | |
| | | CHEM 201L Organic Chemistry I: Lab | 1 | |
| | | CHEM 202 Organic Chemistry II | 3 | |
| | | CHEM 202L Organic Chemistry II: Lab | 1 | |
| | | CHEM 298 Chemistry Seminar IIA | .5 | |
| | | CHEM 299 Chemistry Seminar IIB | .5 | |
| | | CHEM 303 Modern Analytical Chem | 3 | |
| | | CHEM 303L Modern Analytical Chem Lab | 1 | |
| | | CHEM 305 Inorganic Chemistry | 3 | |
| | | CHEM 310 Found of Physical Chem | 4 | |
| | | CHEM 415 Integrated Lab Experience I | 2 | |
| | | CHEM 416 Integrated Lab Experience II | 2 | |
| | | CHEM 450 Environmental Chemistry | 3 | |
| | | CHEM 470 Fuel Chemistry | 3 | |
| **Physics Requirements: 8** Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | PHYS 201 Principles of Physics I - with Calculus | 3 | |
| | | PHYS 101L Principles of Physics I: Lab | 1 | |
| | | PHYS 202 Principles of Physics II - with Calculus | 3 | |
| | | PHYS 102L Principles of Physics II: Lab | 1 | |
| **Mathematics (Minor) Requirements:** 18 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | MATH 210A Calculus I | 3 | |
| | | MATH 211A Calculus II | 3 | |
| | | MATH 221 Statistics | 3 | |
| | | MATH 310 Calculus III | 3 | |
| | | MATH 311 Calculus IV | 3 | |
| | | MATH 410Elem Differential Equations | 3 | |

**Additional Requirements: see the next sheet which includes courses at University of Dayton**
***Math and Science requirements in major also fulfill core requirements; MATH 155 and MATH 156 are prerequisites for MATH 207.**

# UNIVERISTY OF DAYTON COURSES: Proposed Curriculum

| Materials Engineering (Year 4 at University of Dayton) | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | | Credit Hours |
| | | EGR 201 | Mechanics | 3 |
| | | EGR 202 | Engineering Thermodynamics | 3 |
| | | MAT 501 | Principles of Materials I (graduate) | 3 |
| | | MAT 502 | Principles of Materials II (graduate) | 3 |
| | | MAT 504 | Techniques of Materials Analysis | 3 |
| | | MAT 506 | Mechanical Behavior of Materials | 3 |
| | | MAT 509 | Polymers | 3 |
| | | | | |
| | | **Electives:** | 6 hours of Engineering Courses | |
| | | | Engineering course (graduate) | 3 |
| | | | Engineering course (graduate) | 3 |
| | | | | |
| | | CHEM 390 | Chemistry Internship | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| | | | General Education Course Counting for Walsh | 3 |
| **Total for Summer, Fall and Spring of Year 4** | | | | **36** |

## University of Dayton Information:

Year 4 at the University of Dayton may start with courses in summer following the Walsh junior year. The summer, fall and spring of year 4 will be at the University of Dayton. Total credits at UD, including summer, fall and spring for year 4 will be 25 credit hours of engineering courses.

The first 3 years at Walsh will include the first page of this curriculum sheet as well as the majority of the general education curriculum. It may require some summer courses to complete this major in the 3 + 2 window. Check with your advisor for details.

At the end of the spring semester in year 4, the BS in Chemistry from Walsh will have been earned and you will graduate from Walsh. You will then need to apply to the UD Master's program (see advisor for details) to complete the 5th year at UD. Once accepted into the UD Master's program, you will complete summer, fall and spring courses at UD (and thesis work if chosen) to finish an MS in Materials Engineering from UD in the spring of year 5.

During year 4, the Walsh pre-engineering student will have both a Walsh and a UD advisor. Special considerations will be made to work with athletes and honors students.

The exact courses involved in this program are subject to change between 2017-2020 as we optimize this new process. All changes will benefit students enrolled.

***Credit Hours: 120+ Main Campus**

**Any repeated courses will not be included in the total earned hours.**

**Professional Aviation 2+2:** 58 Credit Hours
**Bachelor of Science – 120 credits to graduate**
**Division of Math and Science**
Major Curriculum Sheet
**(General Education Core Requirements Listed Separately)*

WALSH UNIVERSITY
EDUCATION FOR LIFE

| **Student:** | **Advisor:** |
|---|---|

| **General Education Requirements:** 3 Credit Hours | | | | |
|---|---|---|---|---|
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | THEO 101 or THEO 102 | 3 | N/A |
| | | **Total General Education Requirements** | 3 | |
| **Area 1: Aviation (Associate Degree of Applied Science in Aeronautics (PPP))** | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | Transfer credits from American Winds | 60 | N/A |
| | | **Total Associate Requirements** | 60 | |
| **Area 2:Choose One Area of Focus (A or B)** 15 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| **A: Business ( focus on Management/Marketing)** | | | | |
| | | BUS 233 Principles of Marketing | 3 | BUS 225 |
| | | BUS 234 TH1:CIT: Principles of Management | 3 | BUS 233 |
| | | BUS 361 Project Management | 3 | ECON 204 |
| | | BUS 430 Digital Marketing | 3 | BUS 233 |
| | | PSYC 240 Industrial/Organizational Psychology | 3 | PSYC 120 recommended |
| **B: Business ( focus on Accounting/Analytics)** | | | | |
| | | BUS 207 Financial Accounting | 3 | N/A |
| | | BUS 208 Managerial Accounting | 3 | BUS 207 |
| | | BUS 232 Business Statistics | 3 | BUS 106 |
| | | BUS 364 Business Research/ Analytics | 3 | N/A |
| | | PSYC 240 Industrial/Organizational Psychology | 3 | N/A |
| | | **Total Area Requirements** | 15 | |
| **Area 3: Humanities for Professionals** 15 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | CHEM 398 Premier Skills/Professionalism | 1 | N/A |
| | | COM 211 **OR** 212 Speech or Interpersonal Communication | 3 | N/A |
| | | GFA 245 The Law and the Legal System | 3 | N/A |
| | | HIST 304 History of Aviation | 3 | N/A |
| | | **Any course at the 200+ level with one of the following prefixes: HIST, GFA, PHIL, THEO, ARHI, ART, MUS, ENG** | 3 | |
| | | **Total Humanities Requirements** | 13 | |
| **Area 4: Electives** 15 Credit Hours | | | | |
| Semester Taken | Final Grade | Course Name | Credit Hours | Prerequisite |
| | | | 3 | |
| | | | 3 | |
| | | | 3 | |
| | | | 3 | |
| | | | 3 | |
| | | **Total Elective Requirements** | 15 | |