PURDUE UNIVERSITY

Multidisciplinary Technology

Purdue Polytechnic Institute-Lafayette

2020-10 PIMDT-BS
120 Credits for graduation

Departmental/Program Major Courses (120 credits)

Required Major Courses (48 credits)

Primary focus area (27 credits)

_____ (3) TLI 11100 Introduction to Manufacturing and Supply Chain Systems
_____ (3) TLI 11200 Foundations of Org Leadership
_____ (3) TLI 15200 Business Principles for Org Leadership
_____ (3) TLI 25400 Leading Change in Technology Organizations
_____ (3) TLI 21300 Project Management
_____ (3) TLI 31400 Leading Innovation in Organizations
_____ (3) TLI 31600 Statistical Quality Control
_____ (3) TLI 39900 Critical Thinking and Ethics
_____ (3) TLI 45570 Cross-Cultural Issues

Secondary focus area (21 credits)

_____ (3) MET 14300 Materials and Processes I
_____ (3) MET 24500 Manufacturing systems
_____ (3) TLI 23500 Introduction to Lean and Sustainable Systems
_____ (3) TLI 33500 Human Factors for Technology Systems
_____ (3) TECH 12000 Design Thinking in Technology *(satisfies Information Literacy and Science, Technology& Society for core)*
_____ (3) TECH 32000 Technology and the Organization
_____ (3) TECH 33000 Technology and the Global Society

Other Departmental /Program Course Requirements (64 credits)

_____ (3) MA 15300 – Algebra & Trig I or MA 15555 – Quantitative Reasoning or MA 15800 Pre-calculus (*satisfies Quantitative Reasoning Selective* for core)
_____ (3) Mathematics/Statistics Selective[1]
_____ (3) Oral Communication Selective[2] (*satisfies Oral Communication for core*)
_____ (3) English Composition Selective[3] (*satisfies Written Communication for core*)
_____ (3) Advanced Communication Selective[4]
_____ (4) Lab Science Foundation Selective[5] *(satisfies Science for core)*
_____ (3) Science Foundation Selective[6] *(satisfies Science for core)*
_____ (3) Behavioral/Social Sciences Selective[7] *(satisfies Human Cultures Behavioral/Social Science for core)*
_____ (3) Humanities Foundation Selective[8] *(satisfies Human Cultures Humanities for core)*
_____ (12) Focus Area Selective[9]
_____ (24) Multidisciplinary Selective[10]

Free Electives[11] (8 credits)

_____ (FE) _____ ____ _____ ____ _____ ____ _____

University Core Requirements (http://www.purdue.edu/provost/initiatives/curriculum/course.html)

Human Cultures Humanities	☐	**Supplemental info. 8**	*Science, Technology & Society Selective*	☐	**TECH 12000**
Human Cultures Behavioral/Social Science	☐	**Supplemental info. 7**	*Written Communication*	☐	**ENGL 10100 or SCLA 10100**
Information Literacy	☐	**TECH 12000**	*Oral Communication*	☐	**COMM 11400 or SCLA 10200**
Science Selective	☐	**Supplemental info. 5**	*Quantitative Reasoning*	☐	**MA 15300 or MA 15555**
Science Selective	☐	**Supplemental info. 6**			

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The student is ultimately responsible for knowing and completing all degree requirements.
myPurduePlan is knowledge source for specific requirements and completion

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- **Purdue policy states that a student may attempt registration in a course no more than three times. An attempt is defined as all courses displayed on a student transcript having grades of (including, but not limited to) A, B, C, D, E, F, W, WF, I and IF.**
- **120 semester credits required for Bachelor of Science degree.**
- **2.0 Graduation GPA required for Bachelor of Science degree.**
- **NOTE: Students must take 32 credit hours of 30000 or 40000 level classes at the Purdue location conferring the degree.**

Purdue Polytechnic, BS degree in Multidisciplinary Technology
Suggested Eight Semester Plan of Study

Semester 1	**Cr**	**Semester 2**	**Cr**
Oral Communication Selective[2]	3	Lab Science Foundation Selective[5]	4
MA 15300 Algebra & Trig or MA 15500 Quantitative Reasoning or MA 15800 Pre-Calculus	3	Mathematics/Statistics Foundation Selective[1]	3
TECH 12000 Design Thinking in Technology	3	English Composition Selective[3]	3
Humanities Foundation Selective[8]	3	Primary Focus Area: TLI 11200 Foundations of Organizational Leadership	3
Primary Focus Area: TLI 11100 Introduction to Manufacturing and Supply Chain Systems	3	Secondary Focus Area: MET 14300 Materials and Processes I	3
TOTAL	15	TOTAL	16

Semester 3	**Cr**	**Semester 4**	**Cr**
Science Foundation Selective[6]	3	Primary Focus Area: TLI 25400 Leading Change in Technology Organizations	3
Focus Area Selective[9] TLI 25500 Foundations of Human Resource Development	3	Focus Area Selective[9] TLI 33400 Economic Analysis for Technology Systems	3
Secondary Focus Area: TLI 23500 Intro to Lean and Sustainable Systems	3	Behavioral/Social Sciences Selective[7]	3
Primary Focus Area: TLI 15200 Business Principles for Organizational Leadership	3	Secondary Focus Area: MET 24500 Manufacturing Systems	3
Multidisciplinary Selective[10]	3	Multidisciplinary Selective[10]	3
TOTAL	15	TOTAL	15

Semester 5	**Cr**	**Semester 6**	**Cr**
Secondary Focus Area: TLI 33520 Human Factors for Technology Systems	3	TECH 33000 Technology and the Global Society	3
Primary Focus Area: TLI 21300 Project Management	3	Advanced Communication Selective[4] ENGL 42100 Technical Writing	3
TECH 32000 Tech and the Organization	3	Primary Focus Area: TLI 39900 Critical Thinking and Ethics	3
Focus Area Selective[9] TLI 43640 Lean Six Sigma	3	Focus Area Selective[9] TLI 43530 Operations Planning and Management	3
Multidisciplinary Selective[10]	3	Free Elective[11]	3
TOTAL	15	TOTAL	15
Semester 7	**Cr**	**Semester 8**	**Cr**
Primary Focus Area: TLI 31400 Leading Innovation in Organizations	3	Primary Focus Area: TLI 31600 Statistical Quality Control	3
Multidisciplinary Selective[10]	3	Primary Focus Area: TLI 44570 Cross-Cultural Issues	3
Multidisciplinary Selective[10]	3	Multidisciplinary Selective[10]	3
Multidisciplinary Selective[12]	3	Multidisciplinary Selective[10]	3
Free Elective[11]	3	Free Elective[11]	2
TOTAL	15	TOTAL	14

MDT Supplemental Information

All prerequisites must be met

[1]Mathematics/Statistics Selective (3 credits)

MA 15800 Pre-calculus
MA 16010 Applied Calculus I
MA 16100 Plane Analytic Geometry & Calculus I
MA 16200 Plane Analytic Geometry & Calculus II
MA 16500 Analytic Geometry & Calculus I
MA 16600 Analytic Geometry & Calculus II
STAT 22500 Intro Probability Models
***STAT 30100 Elementary Statistics Methods**

[2]Oral Communication Selective *(satisfies Oral Communication for core, 3 credits)*
COM 11400 Fundamentals of Speech or COM 21200 Interpersonal Communication or SCLA 10200 Critical Thinking and Communication II

[3] English Composition Selective (*satisfies Written Communication for core, 3 credits*)
ENGL 10100 English Composition I or ENGL 10600 Written Composition, or ENGL 10800 Accelerated First Year Composition or SCLA 10100 Critical Thinking & Communication I

[4]Advanced Communication Selective (3 credits)
ENGL 421 Technical Writing

[5]Lab Science Foundation Selective *(satisfies Science for core, 4 credits)*
Must be a lab from the below list that is from the approved UCC Science list:
http://www.purdue.edu/provost/initiatives/curriculum/course.html

ASTR 26300 Descriptive Astronomy: The Solar System
ASTR 26400 Descriptive Astronomy: Stars and Galaxies
BIOL 11000 Fundamentals of Biology I
BIOL 11100 Fundamentals of Biology II
BIOL 12100 Biology I: Ecology, Diversity, & Behavior
BIOL 13100 Biology II: Dev, Structure & Function of Organisms
BIOL 13500 First year Biology lab
BIOL 14600 Introduction to Biology
BIOL 20300 Human Anatomy and Physiology
BIOL 20400 Human Anatomy and Physiology
BTNY 11000 Intro to Plant Science
CHM 11100 General Chemistry
CHM 11200 General Chemistry
CHM 11500 General Chemistry
CHM 11600 General Chemistry
CHM 12500 Introduction to Chemistry
CHM 12600 Introduction to Chemistry II
CHM 13600 General Chemistry Honors
CHM 20000 Fund of Chemistry
EAPS 10900 The Dynamic Earth
EAPS 11100 Physical Geology
EAPS 11200 Earth through Time
EAPS 24300 Earth Materials I
EAPS 24400 Earth Materials II
ENTM 20600 General Entomology & ENTM 20700 General Entomology Lab
HORT 10100 Fundamentals of Horticulture
PHYS 17200 Modern Mechanics
PHYS 21800 General Physics I
PHYS 21900 General Physics II
PHYS 22000 General Physics
PHYS 22100 General Physics
PHYS 24100 Electricity & Optics
PHYS 27200 Electric & Magnetic Interactions

[6]Science Foundation Selective *(satisfies Science for core, 3 credits)*
Must be a class from the approved UCC Science list: http://www.purdue.edu/provost/initiatives/curriculum/course.html
CHM 11100 General Chemistry
PHYS 21800 General Physics I
PHYS 21900 General Physics II

[7]Behavioral/Social Science Foundational Selective *(satisfies Human Cultures Behavioral/Social Science for core, 3 credits)*
Must be a class from the approved UCC Science list: http://www.purdue.edu/provost/initiatives/curriculum/course.html
(3) PSY 12000 Elementary Psychology
(3) SOC 10000 Introductory Sociology)
(3) ANTH 10000 Introductory Anthropology
(3) ECON 21000 Principles of Economics
(3) POL 10100 American Government

[8]Humanities Foundational Selective *(satisfies Human Cultures Humanities for core, 3 credits)*
See approved UCC Humanities list at: http://www.purdue.edu/provost/initiatives/curriculum/course.html
(3) PHIL 11000 Intro to Philosophy

(3) PHIL 11100 Ethics
(3) HIST 15100 American History to 1877
(3) HIST 15200 US Since 1877

[9] Focus Area Selective Courses (12 credits)
(3) TLI 25500 Foundations of Human Resource Development
(3) TLI 33400 Economic Analysis for Technology Systems
(3) TLI 43530 Operations Planning and Management
(3) TLI 43640 Lean Six Sigma

[10]Multidisciplinary Selective Courses (24 credits)
(3) COM 32000 Small Group Communication
(3) CGT 11000 Technical Graphics Communication
(3) CNIT 10500 Introduction to "C" Programming
(3) CNIT 15501 Introduction to Software Development
(3) ECET 22400 Electronic Systems
(3) MET 10200 Production Design and Specifications
(3) MET 11100 Applied Statics
(3) MET 14400 Materials and Processes II
(3) MET 28400 Introduction to Industrial Controls
(3) MFET 24800 Introduction to Robotics
(3) MFET 34400 Automated Manufacturing Processes
(3) TLI 21400 Intro to Supply Chain Management
(3) TLI 22000 Designing Technology for People
(3) TLI 33610 Risk Analysis and Assessment
(3) TLI 33620 Total Productive Maintenance
(3) TLI 34200 Warehouse and Inventory Management
(3) TLI 35560 Legal Aspects and Issues in Organizations

[13]Free Electives (7-8 credits)
The number for Free Elective credit available depends on the Science Selective chosen.