

Date Submitted: 02/02/23 1:03 pm

Viewing: **BAC-INTM-3 : Bachelor of Industrial Technology and Management**

Last approved: 06/10/22 11:55 am

Last edit: 02/02/23 1:03 pm

Changes proposed by: houser

Catalog Pages [Bachelor of Industrial Technology and Management](#)
Using this Program

Program Status	Active		
Requestor	Name	Pamela Houser Patty Johnson Winston	E-mail
		houser@iit.edu	
Origination Date	2023-2-2 2022-6-10		
Is this an interdisciplinary program?	No		
Academic Unit College	Industrial Technology & Mgmt Armour College of Engineering		
Program Title	Bachelor of Industrial Technology and Management		
Effective Academic Year	2023 2022 - 2024	Effective Term	Fall 2023
Academic Level	Undergraduate		
Program Type	Degree		
Degree Type	Professional Bachelor (BAC)		
CIP Code			

In Workflow

1. INTM Curriculum Committee Chair
2. INTM Chair
3. Academic Affairs
4. Undergraduate Academic Affairs
5. AC Dean
6. Undergraduate Studies Committee Chair
7. Faculty Council Chair
8. Academic Affairs

Approval Path

1. 02/02/23 9:13 am
Pamela Houser (houser): Approved for INTM Curriculum Committee Chair
2. 02/02/23 9:15 am
Pamela Houser (houser): Approved for INTM Chair
3. 02/02/23 12:52 pm
Patty Johnson Winston (winston): Rollback to Initiator
4. 02/02/23 1:46 pm
Pamela Houser (houser): Approved for INTM Curriculum Committee Chair
5. 02/02/23 1:47 pm
Pamela Houser (houser): Approved for INTM Chair
6. 02/02/23 2:49 pm
Patty Johnson Winston (winston):

History

1. Oct 6, 2017 by
clmig-jwehrheim
2. Oct 17, 2017 by
clmig-jwehrheim
3. Oct 18, 2017 by
clmig-jwehrheim
4. Nov 3, 2017 by
Sarah Pariseau
(sparisea)
5. May 21, 2018 by
Pamela Houser
(houser)
6. Jun 19, 2018 by
Sarah Pariseau
(sparisea)
7. Jun 19, 2018 by
Sarah Pariseau
(sparisea)
8. Mar 21, 2019 by
Pamela Houser
(houser)
9. Jun 16, 2020 by
Pamela Houser
(houser)
10. Oct 23, 2020 by
Holli Pryor-Harris
(pryor)
11. Jun 9, 2021 by
Pamela Houser
(houser)
12. Apr 22, 2022 by
Pamela Houser
(houser)
13. Jun 10, 2022 by
Khalilah Guyton-
Hamlin
(kguytonhamlin)
14. Jun 10, 2022 by
Patty Johnson
Winston (winston)

Is there more than one Academic Unit proposer?

No

Program Code BAC-INTM-3

Program Attribute

Total Program 126
Credit Hours

Please provide a
summary and
rationale for the
requested program
revision.

2/2/23 PH: small changes to update CT & MT specializations; adding 3 elective courses (total).

~~2/3/2022 INTM is adding one (1) new course to the Facility Management specialization (INTM 419) and one (1) new course as a general elective (INTM403). Two changes to the SCM specialization include adding an existing course to elective options (INTM 432) and eliminating one course (INTM409). Summary details are identified in attached memo titled "INTM Curriculum Updates_2022-23".~~ 06/10/2022, PJW: Updated iteration code to BAC-INTM-3, per department change from College of Computing to Armour College of Engineering.

Program Narrative and Justification

Narrative description of how the institution determined the need for the program. For example, describe what need this program will address and how the institution became aware of that need. If the program is replacing a current program(s), identify the current program(s) that is being replaced by the new program(s) and provide details describing the benefits of the new program(s). If the program will be offered in connection with, or in response to, an initiative by a governmental entity, provide details of that initiative.

Narrative description of how the program was designed to meet local market needs, or for an online program, regional or national market needs. For example, indicate if Bureau of Labor Statistics data or State labor data systems information was used, and/or if State, regional, or local workforce agencies were consulted. Include how the course content, program length, academic level, admission requirements, and prerequisites were decided; including information received from potential employers about course content; and information regarding the target students and employers.

Narrative description of any wage analysis the institution may have performed, including any consideration of Bureau of Labor Statistics wage data related to the new program.

Narrative description of how the program was reviewed or approved by, or developed in conjunction with, one or more of the following: a) business advisory committees; b) program integrity boards; c) public or private oversight or regulatory agencies (not including the state licensing/authorization agency and accrediting agency); and d) businesses that would likely employ graduates of the program. For example, describe the steps taken to develop the program, identify when and with whom discussions were held, provide relevant details of any proposals or correspondence generated, and/or describe any process used to evaluate the program.

What are the enrollment estimates?

Year 1

Year 2

Year 3

Attach Additional
Program
Justification
Document(s)

[INTM Curriculum Updates_BINTM_2022-23.pdf](#)

Academic Information

Advising

Since quality advising is a key component of good retention, graduation, and career placement, how will students be mentored? What student professional organizations will be formed? How will the department work with the Career Services office to develop industry connections?

Program Resources

Which program resources are necessary to offer this program?

Proposed Bulletin Entry

Admission
Requirements

Bachelor of Industrial Technology and Management Requirements

Admission Transfer Requirements	(60)
Details listed under Admission Requirements	60
Industrial Technology Requirements	(27)
INTM 301 Communications for Workplace	3
INTM 315 Industrial Enterprises	3
INTM 322 Ind Project Management	3
INTM 404 Marketing, Sales, & Prod Intro	3
INTM 408 Cost Management	3
INTM 410 Operations Management	3
INTM 425 Human Resrcs Management	3
INTM 441 Supply Chain Management	3
INTM 459 Issues in Ind Sustainability	3
INTM Electives (Technical and/or Specialization)	(21)
Select 21 credit hours ¹	21
Humanities Electives	(6)
300/400-level courses	6
Social Sciences Electives	(6)
300/400-level courses	6
Interprofessional Projects (IPRO)	(6)
See Illinois Tech Core Curriculum, section E	6
Total Credit Hours	126

¹

See Specializations tab for industrial technology and management specializations. INTM technical electives are specified on this page.

Technical Electives

INTM 403 Management and Leadership	3
INTM 418 Industrial Risk Management	3
INTM 420 Applied Strategies Competitive	3
INTM 427 E-Commerce in Mkt/Supply Chain	3
INTM 477 Entrepreneurship Industry	3

Sample
Curriculum/Program
Requirements

Bachelor of Industrial Technology and Management Curriculum

A suggested program based on half-time attendance. Students may complete coursework at their own pace.

			Year 1
Semester 1	Credit Hours	Semester 2	Credit Hours

<u>INTM 301</u>	3	<u>INTM 322</u>	3
<u>INTM 315</u>	3	INTM Elective	3
<u>INTM 404</u>	3	INTM Elective	3
	9		9
		Year 2	
Semester 1	Credit Hours	Semester 2	Credit Hours
<u>INTM 410</u>	3	<u>INTM 425</u>	3
INTM Elective	3	INTM Elective	3
Humanities Elective (300+)	3	Social Sciences Elective (300+)	3
	9		9
		Year 3	
Semester 1	Credit Hours	Semester 2	Credit Hours
<u>INTM 459</u>	3	<u>INTM 441</u>	3
INTM Elective	3	INTM Elective	3
I PRO Elective I	3	Social Sciences Elective (300+)	3
	9		9
		Year 4	
Semester 1	Credit Hours	Semester 2	Credit Hours
<u>INTM 408</u>	3	I PRO Elective II	3
Humanities Elective (300+)	3	INTM Elective	3
	6		6

Total Credit Hours: 66

Specialization
Requirements

Industrial Technology and Management Curriculum Specializations

Five industrial specializations are available. To earn a specialization, the student must complete four courses within an identified focus area.

Construction Technology (CT)

Covers construction technology, estimating, project management, and contract administration.

Select four courses from the following:

<u>INTM 407</u>	Construction Technology	<u>3</u>
<u>INTM 413</u>	Contract Admn for Construction	3
<u>INTM 415</u>	Advncd Project Mgmt	3
<u>INTM 417</u>	Construction Estimating	3
<u>CAE 471</u>	<u>Construction Plan & Scheduling</u>	<u>3</u>
<u>CAE 472</u>	<u>Construction Site Operation</u>	<u>3</u>

Total Credit Hours

12

Facilities Management (FM)

Covers facilities operations and maintenance (O&M), the role and responsibilities of the facilities manager, integration of new technologies, energy efficiency in buildings, and activities required for LEED certification.

Select four courses from the following: 12

INTM 405	Maintenance Tech and Mgmt	3
INTM 411	Functional Facilities Mgmt	3
INTM 413	Contract Admn for Construction	3
INTM 415	Advncd Project Mgmt	3
INTM 416	Integrated Facilities Mgmt	3
INTM 419	Budgeting and Finance for FM	3
INTM 423	Sustainable Facilities Ops	3

Total Credit Hours 12

Industrial Sustainability (ST)

Covers a range of issues in industrial sustainability, critical material resources, and alternative energies.

INTM 423	Sustainable Facilities Ops	3
INTM 460	Sustainability Critical Matrls	3
INTM 461	Energy Options for Industry	3
INTM 462	Special Topics Sustainability	3

Total Credit Hours 12

Manufacturing Technology (MT)

Covers advanced technologies, process optimization, automation, quality control, and information systems.

Select four courses from the following: 12

INTM 406	Quality Management Systems	3
INTM 434	Digital Transformation	3
INTM 435	Perf Mgmt in Food Operations	3
INTM 436	Lean Manufacturing	3
INTM 437	Smart Factory Automation	3
INTM 438	Advanced Machining for MFG 1	3
INTM 439	Advanced Machining for MFG 1	3
INTM 446	Manufacturing & Logistics Info	3
INTM 448	Agile Methodologies	3
INTM 452	Pharma Mfg Tech, Reg & Prac	<u>3</u>

Total Credit Hours 12

Supply Chain Management (SCM)

Covers strategic supply chain management, inventory, information systems, warehousing and distribution, purchasing, transportation, and export/import activities.

Select four courses from the following: 12

INTM 427	E-Commerce in Mkt/Supply Chain	3
INTM 430	Global Logistics Management	3
INTM 432	Sales and Operations Planning	3
INTM 442	Warehousing and Distribution	3

<u>INTM 443</u>	Purchasing	3
<u>INTM 444</u>	Export/Import	3
<u>INTM 446</u>	Manufacturing & Logistics Info	3
Total Credit Hours		12

Program Outcomes and Assessment Process

What are the learning goals for this program?

In what semesters will the data be collected to assess this learning goal, and by whom?

Provide the name of the rubric that will be used to assess the extent to which students are achieving this learning goal.

How often and by whom will the data be analyzed? What benchmarks or targets will be used to interpret your results?

Briefly describe the process that will be used to share the results with faculty and use these to motivate program improvement.

Attach Additional Assessment Document(s)

Undergraduate Program Requirements

Undergraduate Degree Requirements

Minimum credit hours 126

Specialization required?
Optional

Notes about specialization requirement

Minor required?
No

Proposed General Curriculum

Degree credit hours required 126

Specialization credit hour requirement 12

List Major Course Requirements

List Mathematics Requirements

List Science Requirements

List Computer Science Requirements

List Humanities and Social Sciences Requirements

List Interprofessional Project (IPRO) Requirements

List Technical
Elective Course
Options

List Free Elective
Credit Hours (if
applicable)

Semester-by-
semester plan of
study for the
degree program

Specialization

Reviewer

Comments

Patty Johnson Winston (winston) (02/02/23 12:53 pm): Rollback: Please include the Total Credit Hours for the Construction Technology Specialization.

Key: 2