

Memorandum

Date: 11.17.2021

To: Undergraduate Studies Committee

From: Department of Information Technology and Management

Subj: **PROPOSED DUAL-DEGREE PROGRAM: BACHELOR OF INFORMATION TECHNOLOGY AND MANAGEMENT /
BACHELOR OF SCIENCE IN COMMUNICATION: JOURNALISM OF TECHNOLOGY & BUSINESS CURRICULUM**

Attached is a proposal for an integrated dual degree program leading to the Bachelor of Information Technology and Management (ITM) and the Bachelor of Science in Communication: Journalism of Technology and Business (JTB) Curriculum while maintaining the integrity and program content of each individual degree program.

15 credit hours of ITM courses apply to the Bachelor of Science in Communication (JTB) Technology and Business Requirement with this 15 credit hours applied to both degrees. ITM 100 meets the Core Curriculum Introduction to the Profession requirement for both degrees. ITM 311 fulfills the Core Curriculum Computer Science requirement. The required Minor in each degree is replaced by the second degree.

This proposal has been approved by the Curriculum Committee and the Faculty of the Department of Information Technology and Management and the Department of Humanities.


Ray Trygstad

BACHELOR OF INFORMATION TECHNOLOGY AND MANAGEMENT/ BACHELOR OF SCIENCE IN COMMUNICATION: JOURNALISM OF TECHNOLOGY AND BUSINESS

This program provides an integrated dual degree program leading to the Bachelor of Information Technology and Management (ITM) and the Bachelor of Science in Communication: Journalism of Technology and Business Curriculum while maintaining the integrity and program content of each individual degree program.

Students earning the communication degree specialize in one of four areas: general communication, journalism of science (JS), journalism of technology and business (JTB), or professional and technical communication (PTC). All COM majors take coursework in editing, persuasion, communication law and ethics, and science and technology in society. Journalism specialists add courses in journalism, mass media, and intercultural communication, and JTB specialists also take courses in economics, business, information technology, writing about technology, and history of technology.

A maximum of nine credit hours of ITM graduate courses taken as an undergraduate may be applied to the Master of Information Technology and Management degree, and any graduate courses taken to fulfill undergraduate degree requirements may not also be applied to a graduate degree unless the student is enrolled in a co-terminal or accelerated master's degree program.

Required Courses

Code	Title	Credit Hours	Code	Title	Credit Hours
ITM Requirements (39)			Mathematics Requirements (7)		
ITM 100	Intro to IT as a Profession	3	MATH 180	Fundamentals of Discrete Math	3
ITM 301	Intro OS and Hardware I	3	or MATH 230	Introduction to Discrete Math	
ITM 311	Intro to Software Development	3	PSYC 203	Undergrad Stats Bhvrl Sci	4
ITM 313	Intro to Open Source App Dev	3	Communication Requirements (9)		
or ITM 312	Intro Systems Sftwr Prgmng	3	COM 371	Persuasion	3
ITMD 321	Data Modeling and Applications	3	COM 377	Communication Law Ethics	4
ITMD 361	Fund of Web Development	3	COM 425	Editing	3
ITMD 362	Human-Computer Interaction	3	Portfolio		
ITMD 411	Intermediate Software Devlpmnt	3	Journalism Requirements (12)		
ITMM 471	Project Management for ITM	3	COM 372	Mass Media Society	3
ITMO 340	Intro Data Networks & Internet	3	COM 421	Technical Communication	3
ITMO 356	Intro Open Source OS	3	COM 435	Intercultural Communication	3
ITMS 448	Cyber Security Technologies	3	COM 440	Introduction to Journalism	3
ITMT 430	System Integration	3	Technology and Business Requirement ¹ (9)		
ITM Electives (General or Specialization) (18)			BUS 210	Accounting for Non-Business Majors	3
Select 18 credit hours from INTM, ITM, ITMD, ITMM, ITMO, ITMS, ITMT, and TECH		18	BUS 301	Organizational Behavior	3
Natural Science and Engineering Requirements (11)			or BUS 371	Marketing Fundamentals	
EG 225 is recommended			ECON 211	Principles of Economics	3
See Illinois Tech Core Curriculum, section D		11	ITM 301, ITM 311, ITM 321, ITM 361, ITMO 340 ¹		
Humanities and Social Sciences Requirements (21)			Science and Technology in Society (STS) Elective (6)		
See Illinois Tech Core Curriculum, sections B and C		21	Select 6 credit hours from:		
Interprofessional Projects (IPRO) (6)			HIST 375	History of Computing	3
See Illinois Tech Core Curriculum, section E		6	HIST 382	Technology in Hist 1500-1850	3
Free electives (4)			HIST 383	Tech History 1850 Present	3
Select 4 credit hours		4	Total Credit Hours		
					142

¹ 15 credit hours of ITM courses apply to the Technology and Business Requirement for an actual total of 24, with 15 credit hours applied to both degrees

Bachelor of Information Technology and Management/Bachelor of Science in Communication: Journalism of Technology and Business Curriculum

Semester 1	Credit Hours	Semester 2	Year 1 Credit Hours
ITM 301	3	ITM 311	3
ITM 313 or 312	3	ITMD 362	3
ITMD 361	3	COM 372	3
Natural Science or Engineering Elective	4	MATH 180 or 230	3
Humanities 200-level Elective	3	Social Sciences Elective	3
	16		15

Semester 1	Credit Hours	Semester 2	Year 2 Credit Hours
ITM 100	3	ITMO 340	3
ITMD 411	3	COM 371	3
COM 377	3	COM 421	3
PSYC 203	4	COM 435	3
Natural Science or Engineering Elective	3	Natural Science or Engineering Elective	4
	16		16

Semester 1	Credit Hours	Semester 2	Year 3 Credit Hours
ITMD 321	3	ITM Elective	3
ITMM 471	3	COM 440	3
ITMO 356	3	BUS 210	3
STS Elective ¹	3	Humanities Elective (300+)	3
ECON 211	3	Social Sciences Elective (300+)	3
	15		15

Semester 1	Credit Hours	Semester 2	Year 4 Credit Hours
ITMS 448	3	ITMT 430	3
ITM Elective	3	ITM Elective	3
ITM Elective	3	STS Elective ¹	3
COM 425	3	Social Sciences Elective (300+)	3
BUS 301 or 371	3	Free elective	4
I PRO Elective I	3		
	18		16

Semester 1	Year 5 Credit Hours
ITM Elective	3
ITM Elective	3
I PRO Elective II	3
Humanities Elective (300+)	3
Humanities or Social Sciences Elective	3
	15

Total Credit Hours: 142

¹ Select from: HIST 375, HIST 382, or HIST 383.

Information Technology and Management Curriculum Specializations

The ITM electives may be chosen from one or more of the following course specializations. ITM required courses may not be counted toward completion of elective requirements for specializations.

With the permission of the adviser, other undergraduate or graduate courses in the same area may be substituted for courses in a specialization.

Data Management

Focuses on the design, development, and administration of traditional and Internet-based data management.

Code	Title	Credit Hours
ITMD 422	Advanced Database Mgmt	3
ITMS 428	Database Security	3
Select two courses from the following:		
ITMO 444	Cloud Computing Technologies	3
or any ITMD electives		
Total Credit Hours		12

IT Entrepreneurship and Management

Focuses on the managerial and entrepreneurial skills needed to launch a new enterprise.

Code	Title	Credit Hours
ITMM 470	Fund of Mgmt for Tech Prof	3
ITMM 481	IT Entrepreneurship	3
ITMM 482	Business Innovation	3
Select one course from ITMM or the following:		
	any BUS electives at the 200-level or above	3
	or any INTM electives selected with adviser's approval	3
Total Credit Hours		12

Networking and Communications

Focuses on network applications and management.

Code	Title	Credit Hours
ITMO 441	Network Admin & Operations	3
ITMO 446	Telecomm Over Data Networks	3
Select one course from the following:		
ITMO 433	Enterprise Server Admin	3
ITMO 453	Open Source Server Admin	3
Select one course from ITMO, ITMT, or the following:		
ITMD 465	Rich Internet Applications	3
ITMS 443	Vulnerability Analys and Ctrl	3
ITMS 478	Cyber Security Management	3
Total Credit Hours		12

Software Development

Focuses on programming and the development of sophisticated applications.

Code	Title	Credit Hours
ITMD 415	Advanced Software Development	3
ITMD 462	Web Site App Development	3
Select two courses from the following:		
ITMD 412	Adv Structured & Systems Prg	3
ITMD 413	Open-Source Programming	3
ITMD 419	Topics in Software Development	3
ITMD 453	Enterprise Intelligent Device	3
ITMD 454	Mass-Market Intelligent Device	3
ITMD 455	Open-Source Intelligent Device	3
or any ITMD elective		
Total Credit Hours		12

System Administration

Focuses on the administration and the management of servers.

Code	Title	Credit Hours
ITMO 441	Network Admin & Operations	3
Select two courses from the following		
ITMO 433	Enterprise Server Admin	3
ITMO 450	Enterprise End-User Sys Admin	3
ITMO 453	Open Source Server Admin	3
Select one course from the following:		
ITMO 417	Shell Scripting for Sys Admin	3
ITMO 444	Cloud Computing Technologies	3
ITMO 454	Operating Sys Virtualization	3
ITMS 458	Operating System Security	3
Total Credit Hours		12

Systems Security

Focuses on application, data, and network security and the management of information technology security.

Code	Title	Credit Hours
ITMS 478	Cybersecurity Management	3
Select one course from the following:		
ITMO 433	Enterprise Server Admin	3
ITMO 441	Network Admin & Operations	3
ITMO 450	Enterprise End-User Sys Admin	3
ITMO 453	Open Source Server Admin	3
Select two ITMS electives		
Total Credit Hours		12

Web Design and Application Development

Focuses on the design and development of fully-interactive websites and applications for Internet deployment.

Code	Title	Credit Hours
ITMO 441	Network Admin & Operations	3
ITMD 462	Web Site App Development	3
Select two courses from the following;		6
ITMO 444	Cloud Computing Technologies	3
ITMD 453	Enterprise Intelligent Device	3
ITMD 454	Mass-Market Intelligent Device	3
ITMD 455	Open-Source Intelligent Device	3
ITMD 463	Intermediate Web App Develop	3
ITMD 464	Adv Web Appl Devlpmnt	3
ITMD 465	Rich Internet Applications	3
ITMD 466	Service-Oriented Architectures	3
ITMD 467	Web Systems Integration	3
ITMD 469	Topics in Application Develop	3
Total Credit Hours		12