

New Program Proposal

Date Submitted: 03/25/24 9:24 pm

Viewing: **BS-ICDV : Bachelor of Science in Information Communication & Data Visualization**

Last edit: 03/25/24 9:24 pm

Changes proposed by: hringler

Program Status	Active		
Requestor	Name	Hannah Ringler	E-mail
	hringler@iit.edu		
Origination Date	2024-3-25		
Is this an interdisciplinary program?	No		
Academic Unit	Humanities		
College	Lewis College of Science and Letters		
Program Title	Bachelor of Science in Information Communication & Data Visualization		
Effective Academic Year	2024 - 2025	Effective Term	
	Fall 2024		
Academic Level	Undergraduate		

If all courses in a subject in your department are required, please enter each subject followed by the number ranges in the "Quick Add" field in the pop up box when you click the green plus button below. For example: ARCH 100-499.

What courses will factor the major GPA?
COM 421 - Technical Communication
COM 424 - Document Design
COM 428 - Verbal and Visual Communication
COM 425 - Editing
COM 372 - Mass Media and Society
COM 353 - Media and Globalization
COM 382 - Social Media and Society

In Workflow

1. HUMA Chair
2. Academic Affairs
3. Undergraduate Academic Affairs
4. Director of Assessment
5. LS Dean
6. Marketing and Communications
7. Undergraduate Studies Committee Chair
8. Faculty Council Chair
9. Faculty Council Chair
10. Provost
11. President
12. Board of Trustees
13. Academic Affairs

Approval Path

1. 03/05/24 11:46 am
Matthew Bauer (bauerma):
Approved for HUMA Chair
2. 03/06/24 11:16 am
Ayesha Qamer (aqamer): Rollback to Initiator

HIST 373 - History of Video Games
PSYC 203 - Undergraduate Statistics for the Behavioral Sciences
MATH 225 - Introductory Statistics
MATH 425 - Statistical Methods
MATH 426 - Statistical Tools for Engineers
CHE 426 - Statistical Tools for Engineers
MATH 474 - Probability and Statistics
MATH 475 - Probability
MATH 476 - Statistics
BUS 221 - Business Statistics
COM 438 - Technical Exhibit Design
HUM 372 - Interactive Storytelling
COM 437 - Video Documentation
ITMD 362 - Human-Computer Interaction and Web Design
CS 442 - Mobile Applications Development
FDSN 320 - Food Law, Labels, and Health Claims
INTM 301 - Communications for the Workplace
PSYC 312 - Human Motivation and Emotion
COM 497 - Special Project
MAX 502 - Analytics for Decision Making
MAX 507 - Visual Analytics - Data Analytics & Visualization

Program Type Degree

Degree Type Bachelor of Science (BS)

CIP Code

09.0908 - Technical and Scientific Communication.

Is there more than one Academic Unit proposer?

No

Program Code BS-ICDV

Program Attribute

Total Program 126

Credit Hours

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.

Illinois Tech currently offers a B.S. in Communication: Professional and Technical Communication. However, this program has had historically low enrollment and appeal to students. The Humanities Department believes this is due to a) outdated curriculum, and b) a lack of structured curriculum which provides marketable training in this area.

This new B.S. ICDV program is designed as a replacement for the current Professional and Technical Communication degree. Over time and as technology has progressed, the field has generally moved away from "technical communication" and into areas like data visualization and information communication, which this program reflects. Moreover, it is designed to build skills in media studies, statistics, and data visualization, on top of traditional technical communication skills. These skills culminate in a capstone or thesis project, where students can engage deeply with communication practices and complexities in other fields, thus allowing students to customize their communication expertise to the unique qualities of other fields. Finally, this program allows for 40 credits of free electives, and as such, would be a marketable second major for many students.

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.

Communication skills are widely regarded as incredibly important for workers in technical degree fields. Employers also regularly report communication skills as lacking by many recent graduates in engineering and related fields. In response, agencies like ABET have explicitly added communication skills to their accreditation criteria.

We believe that students who add this degree as a second major (on top of an engineering or computing-related degree) will thus enhance their marketability by highlighting not only their technical skills, but a unique dedication to communication skills which employers find important and rare. We have thus designed this program with 40 credit hours of free electives, so that students can easily add it as a second major. In addition, we have designed the requirements to be integrated with developing technical communication skills in their majors: students must engage in statistics and specialized communication-related courses (many in majors) as part of this degree program, fostering a deeper engagement between discipline and communication skills which can be explored further in the final thesis or capstone.

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.

N/A

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.

N/A

Admission Entry Details

Available Fall Admit	Yes	Available Spring Admit	Yes
			Available Summer Admit
Yes			
Available On Campus	Yes		Available Online
	No		
Available Full-Time	Yes		Available Part-Time
Yes			
Available International	Yes		Available Domestic
	Yes		

What are the enrollment estimates?

Year 1	10	Year 2	20	Year 3	25
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Attach Additional Program Justification Document(s)

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 Committee (faculty). Responsible for the content of curriculum. Runs program assessment. Updates curriculum based on assessment results. Supports professional development activities for students on campus and works with related student organizations to help support the campus ecosystem for communication skills. This committee should have a minimum of 3 members with at least two drawn from HUM. Committee will report on program to the chair of HUM, and the dean of Lewis College.
- Program Adviser (staff). Responsible for front-line advising of students to ensure students understand degree requirements and take the necessary courses. Points students to other resources, when they need specialized or additional support. Tracks majors through graduation.

Program Resources

Which program resources are necessary to offer this program?

Proposed Catalog Entry

Admission

Requirements

This degree program has no additional admission requirements, outside of the university's standard undergraduate degree requirements.

Course Requirements

Required Courses

Foundations		(12)
Take each of the following courses		12
COM 424	Document Design	3
COM 421	Technical Communication	3
COM 428	Verbal and Visual Communication	3
COM 425	Editing	3
Communication and Media Studies Requirement		(6)
Select two courses from the following		6
COM 372	Mass Media and Society	3

COM 353	Media and Globalization	3
COM 382	Social Media and Society	3
HIST 373	History of Video Games	3
Statistics Requirement		(3)
Select 1 course from the following		3
PSYC 203	Undergraduate Statistics for the Behavioral Sciences	4
MATH 225	Introductory Statistics	3
MATH 425	Statistical Methods	3
MATH/CHE 426	Statistical Tools for Engineers	3
MATH 474	Probability and Statistics	3
MATH 475	Probability	3
or MATH 476	Statistics	
BUS 221	Business Statistics	3
Technical Electives		(6)
Select 2 courses from the following		6
COM 438	Technical Exhibit Design	3
HUM 372	Interactive Storytelling	3
COM 437	Video Documentation	3
ITMD 362	Human-Computer Interaction and Web Design	3
CS 442	Mobile Applications Development	3
FDSN 320	Food Law, Labels, and Health Claims	3
INTM 301	Communications for the Workplace	3
ITM 300	Communication in the Workplace	3
PSYC 312	Human Motivation and Emotion	3
PSYC 362	Human-Computer Interaction and Web Design	3
MAX 502	Analytics for Decision Making	3
MAX 507	Visual Analytics - Data Analytics & Visualization	3
Capstone or Thesis		(6)
COM 497	Special Project	6
STEM Module		(15)
Choose 2 credit hours of Computer Science		2
Choose 2-3 credit hours of Mathematics <small>Some of the Core-required Math credits are fulfilled by major requirements.</small>		3
Choose 10-11 credit hours of Natural Science or Engineering		10

Introduction to the Profession		(2)
<u>LCHS 100</u>	Introduction to the Professions	2
Interprofessional Projects (IPRO)		(6)
<u>See Illinois Tech Core Curriculum, section E</u>		6
Humanities and Social Science Requirements		(24)
<u>COM 101</u>	Writing in the University	3
or <u>COM 111</u>	Writing in the University for Multilingual Speakers of English	
<u>HUM 200</u>	Topics in Humanities	3
or <u>HUM 202</u>	Industrial Culture	
or <u>HUM 204</u>	Age of Darwin	
or <u>HUM 206</u>	Life Stories	
or <u>HUM 208</u>	Digital Culture	
or <u>HUM 250</u>	Introduction to Science, Technology, and Society	
Humanities (H) electives		6
Social Science (S) electives		9
(H) or (S) elective		3
Free Electives		(40)
Select 40 credit hours of free electives		40
Total Credit Hours		120

Program Outcomes and Assessment Process

What are your learning objectives in this program? Please list each learning objective in the boxes below:

Note: These should be the same as described in your assessment plan at the bottom of this form.

Upload your
assessment plan
here:

Undergraduate Program Requirements

What courses will factor the major GPA?	COM 421 - Technical Communication COM 424 - Document Design COM 428 - Verbal and Visual Communication COM 425 - Editing COM 372 - Mass Media and Society COM 353 - Media and Globalization COM 382 - Social Media and Society HIST 373 - History of Video Games PSYC 203 - Undergraduate Statistics for the Behavioral Sciences MATH 225 - Introductory Statistics MATH 425 - Statistical Methods MATH 426 - Statistical Tools for Engineers CHE 426 - Statistical Tools for Engineers MATH 474 - Probability and Statistics MATH 475 - Probability MATH 476 - Statistics BUS 221 - Business Statistics COM 438 - Technical Exhibit Design HUM 372 - Interactive Storytelling COM 437 - Video Documentation ITMD 362 - Human-Computer Interaction and Web Design CS 442 - Mobile Applications Development FDSN 320 - Food Law, Labels, and Health Claims INTM 301 - Communications for the Workplace PSYC 312 - Human Motivation and Emotion PSYC 362 - Human-Computer Interaction and Web Design COM 497 - Special Project MAX 502 - Analytics for Decision Making MAX 507 - Visual Analytics - Data Analytics & Visualization
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Undergraduate Degree Requirements

Minimum credit hours	126
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Specialization
required?

No

Minor required?

No

Proposed General Curriculum

List Major Course
Requirements

Courses required for all students

Foundations		(12)
COM 424	Document Design	3
COM 425	Editing	3
COM 428	Verbal and Visual Communication	3
COM 421	Technical Communication	3
Communication and Media Studies Requirement		(6)
Select two courses from the following		6
COM 372	Mass Media and Society	3
COM 353	Media and Globalization	3
COM 382	Social Media and Society	3
HIST 373	History of Video Games	3
Statistics Requirement		(3)
Select one course from the following		3
PSYC 203	Undergraduate Statistics for the Behavioral Sciences	4
MATH 225	Introductory Statistics	3
MATH 425	Statistical Methods	3
MATH 426	Statistical Tools for Engineers	3
or CHE 426	Statistical Tools for Engineers	
MATH 474	Probability and Statistics	3
MATH 475	Probability	3
or MATH 476	Statistics	
BUS 221	Business Statistics	3
Capstone or Thesis		(6)
COM 497	Special Project	6

Total Credit Hours	27
List Mathematics Requirements	
See Illinois Tech Core Curriculum, section D	
5-6 credit hours required. Students will fulfill 3-4 of these credit hours through the statistics requirement.	
List Science Requirements	
See Illinois Tech Core Curriculum, section D	
10-11 credit hours required.	
List Computer Science Requirements	
See Illinois Tech Core Curriculum, section D	
2 credit hours required. Some students may fulfill this with CS 442, as part of the Technical Electives requirement.	
List Humanities and Social Sciences Requirements	
See Illinois Tech Core Curriculum, sections B and C	
24 credit hours required.	
List Interprofessional Project (IPRO) Requirements	
See Illinois Tech Core Curriculum, section E	
6 credit hours required.	
List Technical Elective Course Options	
Select two courses from the following	6
COM 438 Technical Exhibit Design	3
COM 437 Video Documentation	3
HUM 372 Interactive Storytelling	3
PSYC 312 Human Motivation and Emotion	3
PSYC 362 Human-Computer Interaction and Web Design	3
FDSN 320 Food Law, Labels, and Health Claims	3
CS 442 Mobile Applications Development	3
ITM 300 Communication in the Workplace	3
ITMD 362 Human-Computer Interaction and Web Design	3
INTM 301 Communications for the Workplace	3

MAX 502	Analytics for Decision Making	3
MAX 507	Visual Analytics - Data Analytics & Visualization	3
Total Credit Hours		6
List Free Elective Credit Hours (if applicable)	40	
Semester-by-semester plan of study for the degree program		
Below is a sample plan of study.		
		Year 1
Semester 1	Credit Hours	Semester 2
		Credit Hours
LCHS 100	2	HUM 200
COM 101	3	MATH 425
Free elective	3	CS 115
Math elective	3	Natural Science or Engineering (N) elective
Natural Science or Engineering (N) elective	4	Free elective
	15	
		Year 2
Semester 1	Credit Hours	Semester 2
		Credit Hours
COM 421	3	COM 424
Natural Science or Engineering (N) elective	3	COM 425
Free elective	3	Free elective
Free elective	3	Free elective
Free elective	3	Free elective
	15	
		Year 3
Semester 1	Credit Hours	Semester 2
		Credit Hours
COM 428	3	COM 382
COM 372	3	ITMD 361
FDSN 320	3	IPRO 397
Free elective	3	Free elective
Free elective	3	Free elective
	15	
		Year 4
Semester 1	Credit Hours	Semester 2
		Credit Hours
IPRO 497	3	COM 497
COM 497	3	Free elective

Free elective	3	Free elective	3
Free elective	3	Free elective	3
Free elective	4	Free elective	3
	16		15
Total Credit Hours: 120			

Reviewer

Comments

Ayesha Qamer (aqamer) (03/06/24 11:09 am): 3/6/2024, AQ: Added program code at the top of the form.

Ayesha Qamer (aqamer) (03/06/24 11:16 am): Rollback: In the course requirements section, under "Stem Module", you have a footnote under "Choose 2-3 credit hours of Mathematics" which is not formatted correctly. Additionally, the total credit hours reads as 120 hours whereas the total program credit hours at the top of the form reads as 126 hours. The total credit hours need to match the total program credit hours at the top of the form. The total credit hours towards the bottom of the form under the semester by semester plan section also reads as 120 hours which do not match the top of the form. Please revise. If you need to contact me, you can reach me at: aqamer@iit.edu to request a meeting.