

Approval Chart for Curriculum Changes

A = Approve I= Information Item¹ R= Advise & Respond²

Course: IT 263

State the requested change and reason. A memo may be attached if more space is necessary.

Create new course IT 263, as described in the new course application.

Circle the number that corresponds to the requested change. Degree plan changes are on the second page.

		COUNCIL ³								
	Change to a Course	Dept./School	College Academic	Deans	TEC	UGEC	UUAC	GRAD	Provost	President
1.	Title (description unchanged)	A	A	A	I				I	I
2.	Description (not affecting content)	A	A	A	I				I	I
3.	Course term(s)	A	I	A	I				I	I
4.	Content (substantive change)	A	A	A	I				A	I
5.	Number of hours (lecture, lab, contact)	A	A	A	A				A	I
6.	Course number within the hundred	A	A	I	I				I	I
7.	Course number beyond the hundred	A	A	A	A				A	I
8.	Prerequisites	A	A	A	I				I	I
9.	Course fee(s)	A	--	A	--				A	I
10.	From U to G <i>or</i> G to U	A	A	A	A				A	I
11.	Cross list with another department: U or G level	A	A	A	A				A	I
12.	Department of record	A	A	A	A				A	I
13.	Open or close a course	A	A	A	A				A	I
14.	New course — See website for application and process. This change includes combining or splitting a course(s).	A	A	A	A				A	I

Note: When an academic unit does not have a council, the UGEC and/or UUAC will serve as its academic council, depending on the nature of the issue.

Approval Chart for Curriculum Changes

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COUNCIL ³												
	Change to a Degree Plan	Dept./School	College Academic	Deans	TEC	UGEC	UVAC	GRAD	Provost	Faculty	President	Board of Trustees
1.	University Requirements — Change in approved course content ⁶	A	A	A	A				A	--	A	--
2.	University Requirements — Add or drop a required course from the University Requirements chart ⁶	A	A	A	A				A	A	A	--
3.	University Requirements — Add or drop a course from a menu within the University Requirements ⁶	A	--	--	A				A	--	A	--
4.	University Requirements — Change hours within a menu on the University Requirements chart ⁶	A	A	A	A				A	A	A	--
5.	Major — Revision of major ^{4,5}	A	A	A	A				A	--	A	--
6.	Major — Adopt or change admission requirements	A	A	A	A				A	--	A	--
7.	Major — Add ^{4,5}	A	A	A	A				A	A	A	I
8.	Major – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
9.	Major – Discontinue (proposed by the Provost)	See below.										
10.	GPA — Revise major or cumulative requirement	A	A	A	A				A	A	A	--
11.	Minor — Revise course selection	A	A	A	I				I	--	I	--
12.	Minor — Add	A	A	A	A				A	--	A	--
13.	Minor – Discontinue (proposed by the department or college)	A	A	A	A				A	--	A	--
14.	Minor – Discontinue (proposed by the Provost)	See below.										
15.	Degree — Add	A	A	A	A				A	A	A	I
16.	Degree – Discontinue (proposed by the department or college)	A	A	A	A				A	A	A	I
17.	Degree – Discontinue (proposed by the Provost)	See below.										
18.	Any change to a graduate degree program	A	A	A	A				A	--	A	--

COUNCIL ³										
	Provost-Proposed Change	Provost	Department	Dean	TEC	UVAC	Graduate	Faculty	President	Board of Trustees
1.	Major/Graduate Program – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I
2.	Minor – Discontinue (proposed by the Provost)	A	R	R	A			--	A	--
3.	Degree – Discontinue (proposed by the Provost)	A	R	R	A			A	A	I

Approval Chart for Curriculum Changes

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COUNCIL ³									
	Change to the Catalog Information	Dept./School	College Academic	Deans	UGEC	UUAC	GRAD	Provost	President
1.	General requirements for graduation including course requirements that are common to all majors for all degrees ⁷	--	--	--		A		A	A
2.	Admission requirements	--	--	--		A		A	A
3.	Policies governing academic probation and suspension	--	--	--		A		A	A
4.	Requirements for graduating with honors	--	--	--		A		A	A

¹ Councils may request additional information about "Information" items. These items are approved as "Consent Agenda."

² The Dean and Department should respond to the Provost's recommendation to close a program in writing. Advise & Respond (R) requires that the voting body should receive the written responses at least one week prior to the vote.

³ All courses that meet University Requirements for general education must go through UGEC. Courses or degrees offered only to students seeking teacher certification must go through the Teacher Education Council. All undergraduate changes must go before the UUAC. All graduate degree plan changes must go through the Graduate Council.

⁴ A minimum of 30 hours is required for a major. A maximum is specified for each degree (e.g., BA, BS). The university minimum for elective hours is 6, unless the requirements of external accrediting bodies make it impossible.

⁵ Program or course changes that apply to any major that includes Teacher Certification will be reviewed by the college, the Teacher Education Council (TEC), and then the UUAC.

⁶ Courses that satisfy ACU's University Requirements (General Education) will normally have lower-level numbering, be free of prerequisites and co-requisites, appeal to more than one or two majors, and "not narrowly focus on those skills, techniques, and procedures specific to a particular occupation or profession" (SACS 2.7.3). Departments may request exceptions to the first three criteria.

⁷ The UUAC approved the clarification that "general requirements for graduation" means the enumerated items in the "General Requirements for Bachelor's Degrees" section of the catalog.

Revised 8-26-19

Curriculum/Catalog Changes Signature Page

Department/School Chair(s) 	
<i>Signature</i>	<i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

College Academic Council(s) 	
<i>Signature</i>	<i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

Dean(s) 	
<i>Signature</i>	<i>Approval date</i>
<i>Signature</i>	<i>Approval date</i>

Teacher Education Council	
<i>Chair's signature</i>	<i>Approval date</i>

General Education Council	
<i>Chair's signature</i>	<i>Approval date</i>

Undergraduate Academic Council	
<i>Chair's signature</i>	<i>Approval date</i>

Graduate Council	
<i>Chair's signature</i>	<i>Approval date</i>

Provost	
<i>Signature</i>	<i>Approval date</i>

Faculty	
<i>Chair of faculty senate</i>	<i>Approval date</i>

President	
<i>Signature</i>	<i>Approval date</i>

Application for a New Course v10.7

Discard instructional pages A-C before submitting application

Course ID (<i>Subject and Number</i>)	IT 263
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I. Systems and Catalog Information Complete each item.

1	Course Developer	John Homer
2	Course Instructor	John Homer, Karen St. John
3	Course Title	Analytics 2: Data Management and Visualization
4	Course Abbreviation for Banner if title is more than 30 characters	Data Management Visualization
5	College	College of Business Administration
6	Department or School	School of Information Technology
7	Number of Credit Hours	3
8a.	Number of contact hours – lecture	3
8b.	Number of contact hours – lab/activity	n/a
9	Is the course for a fixed or variable number of credit hours?	fixed
10	Explanation for variable credit	n/a
11	Is the course repeatable for additional credit?	no
12	Maximum total number of credit hours a student can earn for this course	3
13	What type of course is this? (Select one option. Please see Schedule Type definitions on Page C.)	☒ Traditional lecture ☐ Traditional lab ☐ Traditional lecture/lab ☐ Experiential Learning ☐ Seminar ☐ Studio ☐ Thesis ☐ Dissertation
14	Number of faculty workload hours	3

15	Grade Mode	☒ Standard ☐ Credit/No Credit (undergrad only)
16	Maximum Enrollment	40
17	Catalog Description (50 words or less)	This hands-on course builds practical data management skills useful in almost any workplace, including advanced applications using spreadsheets, an introduction to database structure using SQL and data visualization techniques for better communication. Students continue to hone their abilities to define business problems and contextualize and present data.
18	List any prerequisites (course/s, test scores, class standing, major, etc.)	IS 222 – Analytics 1: Business Statistics
19	List any corequisites (these <i>must</i> be taken at the same time; note that a single requirement cannot be both a prerequisite <i>and</i> a corequisite)	n/a
20	If the course is cross-listed, specify the Course ID(s)	n/a
21	Does this course require any additional student course fees?	☒ No ☐ Yes If yes, attach a completed "Request to Add or Change Course Fees" form. Describe in section IV-8.
22a	Will the course be offered in fall terms?	☐ No ☒ Yes If yes: all, even, or odd years? all
22b	Will the course be offered in spring terms?	☐ No ☒ Yes If yes: all, even, or odd years? all
22c	Will the course be offered in summer terms?	☒ No ☐ Yes If yes: all, even, or odd years?
23	First semester this course will be offered under new Course ID. <i>May not be earlier than the coming fall semester.</i>	Spring 2023
24	Is this course required for a degree/s?	☐ No

		☒ Yes If yes, attach a revised degree plan(s) reflecting the placement of the new course.
25	Should the addition of this course be retroactively applied to the degree plan it supports? <i>This is rare, and rationale should explain compelling extenuating circumstances.</i>	☒ No ☐ Yes If yes, provide rationale:
26	Has this course been offered as a Special Topics course? <i>New courses are not required to be taught as Special Topics courses prior to approval.</i>	☒ No ☐ Yes If yes, provide course ID, term, and enrollment:
27	List any courses in which the content overlaps the proposed course. (Course ID and Name) <i>Attach a statement from the instructor/dept chair of the existing course justifying the new offering in Section IV-D.</i>	

II. Curriculum

- A. Explain effect on degree plans. If the addition of the course alters degree requirements, submit a separate Approval Chart for Curriculum Change to update the degree plan.

This course will be added to the core set of requirements for all BBA degrees in the College of Business Administration.

- B. Justify the addition of this course to the current curriculum, explaining the gap it meets.

Industry benchmarking, including interviews with hiring managers and ACU alumni, suggests that all business students would benefit significantly from foundational exposure to data management and visualization concepts and techniques, as these are skills that can be applied across industries and job functions. These are also foundational for analytics professionals and could help students determine if they are interested in elective analytics coursework.

III. Course Design

- A. Audience and Course Goal

1. Describe the intended audience, including prerequisite skills.

Business majors with basic knowledge/application in statistics
 (prerequisite: IS 222 – Analytics 1: Business Statistics)

2. State the overarching course goal(s) in performance terms.

Building on Business Statistics, this course focuses on the “before and after” of analysis. This includes advanced use of Excel, an introduction to database structure and SQL and additional data visualization training. Throughout this course, students continue to hone their abilities to define business problems and to contextualize and present data effectively. For benchmarking purposes, this course might be comparable to “tools” courses that are common in other business programs, but much more focused on the application to analysis and decision making.

B. Student Learning Outcomes and Measurements

	Student Learning Outcome	Measurement
1	Practice data analysis and analytics, employing domain-appropriate tools (e.g., Excel or comparable)	Homework assignments Exam
2	Demonstrate foundational data management knowledge and skills, employing domain-appropriate tools (e.g., SQL or comparable)	Homework assignments Exam
3	Produce basic data visualizations using provided data sets to best present for your target audience, task, and data	Homework assignment Exam
4	Analyze provided data sets within a stated context	Team project
5		

3. Text and Resources

Give the full publication information of the textbook/s and other required resources and outside readings.

For **combined undergraduate/graduate** courses, make two lists:

- A. full publication information; label **Undergraduate**.
- B. full publication information; label **Graduate**.

IV. Supporting Documentation

Required of all applications	
1	Approval Chart for Curriculum Changes

2	Syllabus — Attach the syllabus for the course based upon the anticipated first-semester offering.
3	Instructional Design — The syllabus must be reviewed by the Adams Center. Attach a copy of the Adams Center letter.
4	Library — Submit new course application and syllabus to the Library dean's office. Attach the Library's memo.
Attach if applicable	
5	Content Overlap — Include one document for each course you listed in Section I-27. Attach statement from instructor/dept chair of existing course justifying the new offering.
6	Departmental Resources — List the resources that support the course and are available only through the department, if applicable. Attach the list of the holdings and the location/s.
7	Resources — List resources (other than library or departmental resources) that are needed to support this course (computers, lab equipment, other technology, etc.). Attach a complete list of all items and indicate possible sources or estimated cost of each. List the sources of any needed funds.
8	Expenses — List additional expenses needed to implement this course (full-time or part-time faculty, graduate or lab assistants, student employees, travel, special student costs, room renovation, storage facility, etc.). Attach a complete list of all items, the estimated cost of each and the source of the funds.
9	Justification — Attach any documents to which you refer in Section II-B.



Contact

Email / Phone: jdh08a@acu.edu / 325-674-6603

Email is not a real-time communication medium.

The instructor will attempt to respond to all emails within one working day.

Office: 236 Mabee Business Building

The instructor intends to be available in office at these times: *Mon | Wed, 1:00–4:30 pm.*

Students with questions will be assisted in order of arrival, with reasonable limits applied in order to help as many as possible. The instructor may also be available to meet at other times, by prearranged appointment. *Note:* these office hours are subject to change if schedule conflicts appear during the semester; students will be informed of any changes.

Course Description, Audience and Outline

Analytics 1: Data Management and Visualization is a hands-on course that builds practical data management skills useful in almost any workplace, including advanced applications using spreadsheets, an introduction to database structure using SQL and data visualization techniques for better communication. Students continue to hone their abilities to define business problems and contextualize and present data. [3 credit hours]

Industry benchmarking, including interviews with hiring managers and ACU alumni, suggests that all business students would benefit significantly from foundational exposure to data management and visualization concepts and techniques, as these are skills that can be applied across industries and job functions. These are also foundational for analytics professionals and could help students determine if they are interested in elective analytics coursework.

This course is intended for students who have a basic knowledge of statistics and experience with Microsoft Excel. Building on Business Statistics (IS 222), this course focuses on the “before and after” of analysis. This includes advanced use of Excel, an introduction to database structure and SQL and additional data visualization training. Throughout this course, students continue to hone their abilities to define business problems and to contextualize and present data effectively. Students who successfully complete this course will be well prepared for continuing work with databases as well as data mining and other topics in data analytics.

Course Details: Location / Time / Textbook / Website

Class will meet TR 1:30 – 2:50 pm, in MBB 115

Textbook (required): *Communicating Data with Tableau*, Ben Jones

Course notes, resources and assignments are available online at <http://acu.instructure.com>.

Mission Statements

The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world. We achieve our mission by providing a supportive, welcoming, Christ-centered community in which we foster academic excellence through innovative education, real-world learning opportunities, and faculty-guided research.

The mission of the College of Business & Technology in ACU is to educate business and technology professionals for Christian service and leadership throughout the world, accomplished through (1) holistic student learning and development, (2) research and innovation, and (3) service and leadership.

The mission of the School of Information Technology and Computing is to educate students in technology-related fields for Christian service and leadership throughout the world.

Outline of Topics / Format of Course

This course introduces basic concepts in data management and visualization in three areas: database design & use (practiced with SQL), data management (practiced with Excel/XLMiner), and data visualization (practiced with Tableau). Each area will occupy approximately one-third of the semester.

Class meetings will vary between an interactive lecture format, with students broadly expected to answer questions and participate in discussion, and hands-on practice with concepts and tools recently presented. Outside of class, students will be expected to complete assignments individually and in groups, applying topics from class and demonstrating familiarity with current software tools.

Assessment

At the end of the semester, a grade in { A,B,C,D,F } will be used to categorize your performance. Your grade will be *earned* by you, **not** assigned to you. Your progress toward course goals will be assessed through:

- **Participation in class discussion** (15%)
Useful and appropriate involvement in class discussion, in whole or in peer groups; participation may also be assessed through in-class quizzes or activities
- **Assignments** (35%)
Regularly scheduled homework assignments to be completed outside of class
- **In-semester exams** (30%)
Exams [3] given in class during the semester (each scheduled at least one week in advance)
- **Final exam** (20%)
Cumulative examination given at end of semester, covering all course content

Your overall course grade will be determined based on cumulative score:

Letter Grade		Course Average
A	Excellent	90.00-100.00%
B	Good	80.00-89.99%
C	Sufficient	70.00-79.99%
D	Insufficient	60.00-69.99%
F	Failing	00.00-59.99%

Late Submissions

Late submissions may be accepted on some assignments, with a 10% reduction per day late applied to the maximum obtainable score (*i.e.*, 1 day late: at most 90%, 2 days late: 80%, *etc.*). For some assignments, late submissions will not be accepted; this restriction will be clearly indicated in the assignment description, where relevant.

Late completion of exams missed due to illness or unavoidable circumstances may be permitted at the discretion of the instructor. It is your responsibility to notify the instructor *as soon as you know* that you will miss an exam and to propose a plan to "make up" the exam. "Make up" exams will not be permitted more than one week late, except in extraordinary circumstances.

Use of Computers, Cell Phones, *etc.*

Students will not be allowed to use any type of computational, communicational or combustible device during class time, except when directed to do so by the instructor as part of an in-class activity, designated "lab" working time, or assessment. All materials used by the instructor in the class session (notes and examples) will be made available to students online. If you believe that a reasonable exemption from this rule should be made for you, please see the instructor. Your overall participation score may be docked 1 point (1% of course grade) for any occasion when the instructor notes your use of a phone, laptop or smart watch during class, unless specifically permitted.

Attendance / Tardiness

You are expected to attend and fully engage in every class session. Attendance requires, of course, your physical presence in the classroom, but also preparation beforehand and attentiveness throughout the class session. Before each class, you should have completed any assigned reading or other work and be prepared to ask pertinent questions about recent or new course topics from the text or homework. If you are unprepared for class, clearly occupied with other materials, or asleep, you may be counted absent even though you are physically present. Students are expected to arrive to class in a timely manner, in accordance with professional etiquette; anyone arriving more than 5 minutes after start of class will be counted absent. "Tardy" is not a categorization of attendance applied in this course.

You may miss up to two weeks of class (4 class meetings) without penalty. Each additional absence will result in a 3% reduction in your overall course grade. If you have missed three weeks of class (6 class meetings), you may be dropped from the course with a failing grade. The faculty in the School of Information Technology and Computing have jointly developed this attendance policy, to be generally used in SITC courses.

Faith and Learning

In a time of overwhelming data, "truth" can sometimes be difficult to find; facts can be pulled out of context to seemingly support different perspectives. This class will equip students with tools and skill sets needed to work in professional endeavors, especially to evaluate and clearly present fact-based assessments. Using case studies from churches and Christ-focused organizations, we will also learn how individuals can effectively use their talents and faith to be shining examples in the world.

Academic Integrity

Students are expected to abide by the University's policies and principles of academic integrity.

Learning is often a collaborative process. You may find yourself able to help another student locate resources or explore a concept they do not understand and another time find yourself in need of similar assistance. You are encouraged to discuss assignments and ideas, to help each other to learn, but you may not provide a solution to another student or use a solution you have not created. Except when properly cited, your submitted writing must be your own work, with reference to external resources or any other person.

All academic integrity violations identified in this course will be treated in full compliance with university policy. After thorough investigation and a meeting with the student(s) involved, the incident will be reported to the Office of Student Life. A first violation of the policy will cause a score of zero for the assignments or exams sourcing or containing copied materials. A second violation will cause an immediate removal from the course with a failing grade.

Special Needs policy

Abilene Christian University is committed to providing a learning atmosphere that reasonably accommodates qualified persons with disabilities. If you believe that you have a disability that may impair your capacity to successfully complete this course, contact the Alpha Scholars Program (325-674-2667).

Title IX policy

At ACU, we strive to comply with all applicable legal requirements prohibiting, preventing, and responding to sexual misconduct against any member of the ACU community. Moreover, as a Christian community, ACU has committed itself, unequivocally, to ensuring a working and learning environment in which the dignity of every individual is respected. If you experience sexual misconduct in any of these forms, we encourage you to **report it** so that we can help maintain a work and academic environment free of unlawful behavior.

Competencies and Measurements

	Student Learning Outcome	Measurement
1	Practice data analysis and analytics, employing domain-appropriate tools (<i>e.g.</i> , Excel or comparable)	- Assignments - Exam #1
2	Demonstrate foundational data management knowledge and skills, employing domain-appropriate tools (<i>e.g.</i> , SQL or comparable)	- Assignments - Exam #2
3	Produce basic data visualizations using provided data sets to best present for your target audience, task, and data	- Assignments - Exam #3
4	Analyze provided data sets within a stated context	- Final exam

Dr. John Homer
MBB 236
jdh08a@acu.edu
(325)674-6603

March 23, 2022

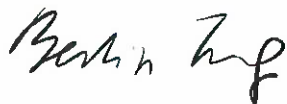
Re: Review of *ITC263*

Dear Dr. Homer,

Thank you for submitting the application for the course *ITC263: Data Management and Visualization*. I have reviewed it based on the [ACU New Course Application Guidelines](#). I find the syllabus to be meeting all requirements. I really appreciate all you did to incorporate my suggestions into the syllabus!

Please note that this letter is not meant to be a final approval in the course application process. Your department chair and members of the council may have questions or comments of their own.

If you have any questions, please feel free to let me know. Please also let me know if we can be of any help in the design and facilitation of this course.

A handwritten signature in black ink, appearing to read "Berni Huff". The signature is fluid and cursive, with the first name "Berni" and the last name "Huff" clearly distinguishable.

Director of Instructional Design, Adams Center

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

MEMORANDUM

DATE: March 22, 2022
TO: Dr. John Homer
FROM: Mark McCallon, Associate Dean for Library Services
RE: Course Application for IT 263 – Analytics 1: Data Management and Visualization

After reviewing the course application for the course, the Library can support the proposed course. Please contact your librarian liaison, Mark McCallon (mccallonm@acu.edu) if additional library resources are needed for the course. Thank you very much for the opportunity to view the course development document.