

UTD Computer Science Graduate Office Degree Planning & Audit Tool

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Goals and Objectives

Project Goal:

Create a tool that allows the Graduate Advising Office to speed up the degree planning and auditing process by creating a tool that allows Degree Plan Evaluators to minimally enter student information to produce a degree plan and audit report

Approach:

Create a web application with simplistic data entry and a clear workflow that encourage swift student data entry.

Front-end web page with three well-constructed forms for filling in student information. Front-end administration page to make updating degree information a breeze. Back-end PDF generation, transcript parsing, and database interfacing to help speed up degree evaluations as much as possible.

Form 1

General Student Information

UTD DEGREE PLANNING AND AUDIT TOOL

Home

Admin

Student Name			
Student ID			
Degree Track	Data Sciences Track	v	
Semester Admitted	2018	v Spring	v
Anticipated Graduation	2022	v Spring	v
Student Transcript:	Browse... No file selected.		

Next

Form One

Requires general student information to help determine which courses are required in their degree.

Information for Form One:

- Student Name
- Student ID
- Major Degree Track
- Admitted Semester
- Anticipated Graduation
- (Optional) Upload Transcript

Form 2

Completed Student Courses

Back

Thesis ☐ Fast Track ☐

Student-Completed Level Courses

CS5333
CS2340
CS3341

Degree Track Level Courses

CS5348
CS5343
CS5303

Student-Completed Required Core Courses

CS6350
CS6363
CS6375
CS6360

Degree Track Required Core Courses

CS6361
CS6301
CS6320
CS6327
CS6347

Elective Courses Taken

Press 'Enter' to add another course to the list.

CS6313
CS6359

Other Courses Taken

Press 'Enter' to add another course to the list.

CSXXXX

Next

Form Two

Gathers information about which courses students have completed towards their degree. Divided between Level, Required Core, and Elective/Other courses. This form includes Drag and Drop for degree track courses and manual entry for Elective courses and other taken courses.

Information for Form Two:

- Thesis or Fast Track designation
- Completed Level Courses
- Completed Core Courses
- Completed Elective Courses
- Completed Other Courses

Form 3

Course Fill-in



Course	Grade	Waive/Transfer	Semester Taken
CS5333	C+ ▾	None ▾	2021 ▾ Fall ▾
CS6360	A- ▾	None ▾	2021 ▾ Fall ▾
CS6375	B+ ▾	None ▾	2021 ▾ Fall ▾
CS6313	A ▾	None ▾	2021 ▾ Fall ▾
CS6350	A ▾	None ▾	2022 ▾ Spring ▾
CS6359	B+ ▾	None ▾	2022 ▾ Spring ▾
CS6363	A ▾	None ▾	2022 ▾ Summer ▾
CS2340	A ▾	None ▾	2020 ▾ Spring ▾
CS3341	A ▾	None ▾	2020 ▾ Spring ▾

* Be sure all student information is correct before submitting.

Form Three

Gathers information about each individual course, used in GPA calculations and report generation. Information important toward the degree plan generation.

Information for Form Three:

- Course Grade
- Course Waive/Transfer Designation
- Semester Course was taken in

Results

UTD DEGREE PLANNING AND AUDIT TOOL

Home

Admin

Degree Plan PDF

Audit Report PDF

View PDF

Download PDF

View PDF

Download PDF

DEGREE PLAN UNIVERSITY OF TEXAS AT DALLAS MASTER OF COMPUTER SCIENCE					
Data Sciences Track					
Name of the Student: Ted Lasso		FT: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> X			
Student ID: 2021998564		Thesis: <input type="checkbox"/> Y <input checked="" type="checkbox"/> X <input type="checkbox"/> N <input type="checkbox"/> X			
Admit Semester: 2021 Fall		Anticipated Graduation: 2022 Spring			
Course Title	Course Number	UTD Semester	Transfer	Grade	
CORE COURSES (16 Credit Hours)		3.19 Grade Point Average Required			
Big Data Management and Analytics	CS6350	2021 Fall		A	
Design and Analysis of Computer Algorithms	CS6363	2021 Fall		A	
Machine Learning	CS6375	2021 Fall		B+	
Database Design	CS6360	2021 Fall		A-	
FIVE APPROVED 6000 LEVEL ELECTIVES (16 Credit Hours)		3.40 Grade Point Average Required			
1	Statistical Methods for Data Science	CS6313	2021 Fall	A	
2	Object Oriented Analysis and Design	CS6359	2021 Fall	B+	
3					
4					
5					
Additional Electives (3 Credit Hours minimum)					
6					
7					
8					
Other Requirements					
Admission Prerequisites		Course	UTD Semester	Waiver	Grade
Discrete Structures		CS5333	2021 Fall	Waived	C+
Computer Architecture		CS5340	2021 Fall	Waived	A
Computer Systems I		CS6303	2021 Fall	Waived	A
Algorithm Analysis and Data Structures		CS5340	2021 Fall	Waived	A
Probability and Statistics in Computer Science and Software Engineering		CS5341	2022 Spring	Waived	A

* May include any 6000 or 7000 level CS course without prior permission

Audit Report

Name: Ted Lasso

Plan: Master

ID: 2021998564

Major: Computer Science

Track: 1

Core GPA: 3.583

Elective GPA: 3.665

Total GPA: 3.427

Core Courses: CS6350,CS6363,CS6375,CS6360

Elective Courses: CS6313,CS6359

Leveling Courses:
CS5333

Outstanding Requirements:
The student needs a GPA of 2.876 in CS6361,CS6301,CS6320,CS6327,CS6347 to maintain a 3.19 core GPA

Admin Page

Edit courses and degree tracks

CS7301	Recent Advances in Computing	 
CS8V02	Topics in Computer Science	 
CS8V07	Research	 
CS8V99	Dissertation	 
SE5354	Software Engineering	 

Add Course

Degree Tracks

Degree Track ID	Degree Track Name	Level Courses	Required Courses	Edit/Delete
1	Data Sciences Track	CS2340, CS5303, CS5333, CS5343, CS5348, CS3341	CS8361, CS6350, CS6363, CS6375, CS6301, CS6320, CS6327, CS6347, CS6360	 
2	Cyber Security Track	CS2340, CS5303, CS5333, CS5343, CS5348, CS5390	CS6324, CS6363, CS6378, CS6332, CS6348, CS6349, CS6377	 
3	Networks and Telecommunications Track	CS2340, CS5303, CS5333, CS5343, CS5348, CS3341, CS5390	CS6352, CS6363, CS6378, CS6385, CS6390	 
4	Traditional Computer Science Track	CS2340, CS5303, CS5333, CS5343, CS5348, CS5349, CS5390	CS6363, CS6378, CS6390, CS6353, CS6360, CS6371	 
5	Intelligent Systems Track	CS2340, CS5303, CS5333, CS5343, CS5348	CS6320, CS6363, CS6364, CS6375, CS6360, CS6378	 
6	Interactive Computing Track	CS2340, CS5303, CS5333, CS5343, CS5348	CS6326, CS6363, CS6323, CS6328, CS6331, CS6334, CS6366	 
7	Systems Track	CS2340, CS5303, CS5333, CS5343, CS5348	CS6304, CS6363, CS6378, CS6396, CS6349, CS6376, CS6380, CS6397	 

Add Degree Track

Admin Page

Allows information about courses offered, degree tracks offered, and GPA requirements across the tool.

Each item displayed is editable, and degree tracks and courses can be added or removed as desired.

Limitations

While useful, the transcript parsing is limited and must be used carefully.

UTD Unofficial Transcript does not include this information available for use:

- Degree Track student is taking
- Anticipated Graduation Date
- Distinction between types of courses taken (level, core, elective, etc.)

Information in Transcript but not pulled with parser:

- Student Thesis/Fast Track distinction

Tool Setup

Initial tool setup requires:

- UTD Website space with a web server set up (preferably by OIT)
- Administrator credentials set up
- Migration of web server and database from development environment to new web server.
- A web URL created.

For degree plan evaluators:

- Accessing the web site using the provided URL

Thank you for listening

