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Excel Programming For A Visual Degree Progress Report

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UNIVERSITY OF **SOUTHERN MAINE**

PORTLAND • GORHAM • LEWISTON • ONLINE

Problem Statement

The University of Southern Maine is like many colleges in the fact that its engineering program has a lot of extensive requirements that a student must achieve before receiving a degree. These include but are not limited to the core and department curriculums, GPA, and Residency Requirements. Most of these are easily accessible to the student on MaineStreet to track progress like the example degree progress report in Figure 2. This progress report shows all of the information by what requirement each class satisfies so it can be really time consuming to scroll through them all, for example, to see if you meet certain prerequisites. Figure 3 shows the course history by subject which can be found on MaineStreet. This information is a lot easier to navigate and also shows the past attempts for a course. This form however does not show the requirement that the course satisfies nor does it show what classes are needed in the future. The engineering department made their own version of a progress report in a more visual way. This progress report has to be manually updated every semester which can be time consuming.

Course	Course Title	Course Type	Term	Official Grade	Units Taken	Repeat Code	Earn Credit	Include in GPA	Instructor	Transfer, Credit
PHI 106	Intro:Why Philosophize ?	LEC	2013 Fall	F	3.00				John N Hines	
PHI 107	Intro:World Philosophy	LEC	2015 Spring	F	3.00	PREV			Derek Anthony Michaud	
PHI 107	Intro:World Philosophy	LEC	2015 Fall	с	3.00	CURR			Derek Anthony Michaud	

Figure 2. Degree Progress Report on MaineStreet

Course Update						
Status Info Requisites						
Subject: PHI	Catalog: 107 Credits	3	Core: A-Cultural Interp	Entry Row: 28		
New Attempt	Semester: Grade:	S	tatus: Completed 👻			
Latest Attempt	Semester: Fa15 Grade:	С				
Previous Attempts	Semester: Sp15 Grade:	F				
	Semester: Fa13 Grade:	F				
	Semester: Grade:					
	Semester: Grade:					

Figure 4. User Input Form

Excel Programming For A Visual Degree Progress Report Advisor: Dr. Carlos Lück Author : Brady Therrien Spring 2017

UNIVERSITY	OF	Curric	ulum 2	Progress Repo			
SOUTHERN MAINE		Advisor:	Prof. X	Student:	: <u>John Doe</u>		
PORTLAND * GORMAN * LE	WISTON - ONLINE	ID#:	<u>0111111</u>	<u>l</u> Major:	EE-BS		Matri
Computer Eng. (+13-10)	Electrical Engi	neering (+36	oredits)		Engine	ering C	ore (89
Upload Records				EYE 112 Fa13 A	ENG Fa13	100 B	Pl Sp L Fa
					Scienc CHY Sp15 L Sp15	e Expl 113 B- C+	Pl Fa L Fa
		ELE Sp15	172 D	COS 160 Sp16 A L Sp16 B	ELE Fa15	216 B	EC Fa
COS 161		ELE Fa16	271 C	ELE 217 Sp16 C- L Sp16 A	EGN Fa17	248	Cr TI Su
COS 285	ELE 342 Fa16 B	ELE	314	ELE 323 Sp17	EGN Sp17	260	Cu Pl Fa
COS 350	ELE 343 Fa17	L EGN	325	EGN 301	MAT	380	EC Sp
COS Elective	Eng. Elective	ELE	351	Eng. Elective	Ethical	Inquiry	Sec E(Sp
	Eng. Elective	L ELE	486	Capstone EGN 402	Eng. El	lective	

Figure 1. Degree Progress Report in Microsoft Ex



Proposed Solution

I decided to use this engineering student progress report and add features that assist them including automating the input of grades. This new progress report is shown in Figure 1. This example is of a student a few years into the electrical engineering program. This version of a progress report shows the same course that was shown on MaineStreet but in a more visual way. Figure 4 shows the user input form which can be accessed by clicking on the course. This gives the user all necessary information relating to the course in a very organized fashion. This progress report gives more information than the one on MaineStreet in a more user friendly fashion to assist faculty and students alike.

ort Term:	<u>Sp17</u>	
ic.: <u>2013</u>		
9.5 credits)		Mechanical Engineering(+39 credits)
UV 121	MAT 152	
14 C	Fa13 D+	
14 C	1015 01	
HY 123	MAT 153	MEE 150
14 A-	Sp14 A	
a14 C+		
GN 210	MAT 252	MEE 251
a15 F	Sp15 B+	
		L
reative Expr	Diversity	
HE 170	HTY 141	MEE 270 MEE 230
14 F	Fa15 B	
ultural Interp	International	
HI 107	GEO 105	MEE 360 MEE 331
a15 C	Fa17	
		L
	Cluster 1	
GN: 304		MEE' 372 MEE' 432
017		
co aoo	Cluster 2	Eng. Elective
10 102		IVIEE 3/3
014 A-		
ng Elective	Chucker 2	
		MEE 374
		WILL 374
xcel		

Grade Status

Features

•Layout- The layout of the new progress report can be seen in Figure 1. This layout has not changed too much from the original with the most notable change being a row of courses on the bottom for classes that don't count towards the curriculum.

•Previous Attempts- A list of previous attempts at a course may also be seen on this progress report either on the user input form or on the raw data sheet up to a maximum of five attempts.

•Comments- The red corners in the cells indicate a popup comment in Excel. In the top left corner of each course cell is the course title and the one to the right is the course description. These two comments and the additional four cells can all be adjusted in the user input form.

•Color-coding- The original document had a colorcoding system based on course completion status that worked well so I used the same system but made it automated. These colors can be seen in Figure 1. The gray is not required, yellow is completed, red is pending, green is enrolled, and blue is advised.

•User Input Form- A user input form can be accessed by clicking on any course. This form is shown in Figure 4. This form can be used to view or change any information about the course including past and current attempts, completion status, course title and description.

•Automation Process- The main feature of this progress report is the automatic transfer of grades from a query file obtained from MaineStreet. This can be done by individual semester or for an entire students' history. This feature will automatically transfer all necessary information and organize it accordingly into the student degree progress report.

