Engineering/CIS
Hiring Justification
Fall 2014

New full-time faculty needed to teach ENGR and CIS courses

Key Points

- New CIS courses for AS-T degree need to be developed and offered for the first time.
- Enrollment in CIS courses is growing rapidly (more than doubling in 2 years) and it has been extremely difficult to find adjunct faculty to support this growth.
- Enrollment in engineering courses has grown to capacity. Continued growth will mean adding sections taught by adjunct faculty.
- 80% of Amelito's load will be covered by grants from spring 2015 to spring 2017, when he is retiring.

LAST 5 SEMESTERS

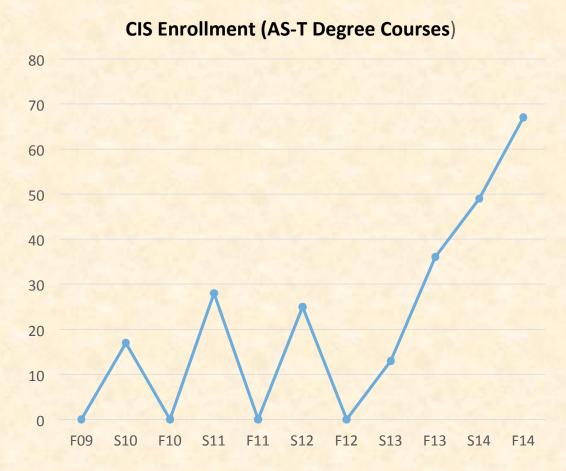
	ENGR			CIS		
Term	FTEF ALL	FT-FTEF	%FT-FTEF	F <u>TEF AL</u> L	FT-FTEF	%FT-FTEF
Fall 2012	1.21	0.57	47%	0.80	0.20	25%
Spring 2013	1.15	0.40	35%	1.12	1.12	100%
Fall 2013	1.21	0.57	47%	1.70	1.10	65%
Spring 2014	1.15	0.53	46%	1.52	0.92	61%
Fall 2014	0.9	0.57	63%	1.92	1.16	60%

NEXT 5 SEMESTERS

Term	ENGR FTEF	CIS FTEF	Total FTEF	FT-FTEF	%FT-FTEF
Spring 2015	1.15	1.92	3.07	1.20	39%
Fall 2015	1.28	2.68	3.96	1.20	30%
Spring 2016	1.15	1.92	3.07	1.20	39%
Fall 2016	1.28	2.68	3.96	1.20	30%
Spring 2017	1.15	1.92	3.07	1.20	39%

Enrollment growth





2012 numbers include a cohort of 15 VEAP students.

Engineering courses require expertise in a wide variety of engineering fields.

Course No.	Cañada course	Engineering Field		
ENGR 100	Intro to Engineering	Any field		
ENGR 111 Surveying		Civil		
ENGR 210	Engineering Graphics	Civil; Mechanical		
ENGR 215	MATLAB	Computer; Electrical		
ENGR 230	Statics	Civil; Mechanical		
ENGR 240	Dynamics	Mechanical		
ENGR 260/261	Circuits	Computer; Electrical		
ENGR 270	Materials Science	Chemical; Materials		

It is advantageous if new full-time faculty is hired to learn these courses before Amelito retires.

Additional reasons

- New TMC in engineering → curricular changes
- A new hire with recent industry experience → strengthen relationships with industry.
- New hire can be involved in the current NSF programs that aim to improve teaching and learning in engineering and computer science benefits future students.
- With 80% of Amelito's salary being grant-funded → College can save up to \$36k/year on salaries.