Emergent Budget Proposal Narrative
Division: College of Science and Engineering

Director of Pre-Engineering Program Development

Please check the appropriate category for this proposal and provide a brief (1-2 sentences) explaining the selection:

☐Urgent unforeseeable items that have arisen since the FY17-19 budget build process
☒Items calling for prompt action that are so critical they cannot wait until the FY20-21 biennial budget build process
☒Items that have arisen as a consequence of changed conditions, such as, but not limited to:
    a) additional enrollments,
    b) a change in leadership at planning unit level, and/or
    c) State or federal policy changes
☒Time-sensitive strategic opportunities that advance the university toward strategic plan fulfillment and are of the highest priority

At a time when the University is increasing its emphasis on equity, inclusion, and diversity – as is clearly indicated in the draft of the new Strategic Plan – the engineering programs are finding it increasingly difficult to maintain diversity as students move from the pre-majors into the majors. The data on students in the pre-engineering and engineering programs clearly indicates that the percent of women-identified students, first-generation students, Pell-eligible students, and under-represented minority (URM) students declines in most cases, and it appears to be getting worse as the programs become more competitive.

This request is time sensitive in that we cannot wait an additional year to begin to address these issues, and thanks to the new strategic plan and new leadership in the College of Science and Engineering there is a new emphasis on investing in solving issues of equity, inclusion, and diversity.

Statement of Purpose: *(What is the problem or opportunity being addressed? How will you address this problem or opportunity?)*

To hire a part-time, professional staff position (0.333 FTE) that focuses on the development and implementation of improvements to the pre-engineering courses and course sequences in order to implement best practices and improve student success with a focus on improving equity, inclusion, and diversity in the engineering programs.

Anticipated Outcome(s):

Changes to the pre-engineering courses and course sequences to implement best practices from other colleges and universities in a manner that fits Western's programs and culture, followed in time by improvements in persistence for women-identified, first-generation, Pell-eligible, and URM students from the engineering pre-majors to the engineering majors. It is also likely that we will implement parallel co-curricular programs in addition to course and course sequence changes, for most colleges and universities that have implemented effective solutions to improve equity, inclusion, and diversity in engineering programs have shown that co-curricular programs help support student persistence and success.

Metrics: *(How will outcomes be measured?)*

The goal is to ultimately be at a place where the distribution of women-identified, first-generation, Pell-eligible, and URM students in the engineering majors is the same as those in the engineering pre-majors, so the metrics will be the rate of persistence of women-identified, first-generation, Pell-eligible, and URM students into the engineering majors relative to students who do not fall into any of those categories.

Indirect measures will be changes to the pre-engineering courses and course sequences, success in obtaining grants or other funding to support the pre-major courses and/or students, and dissemination of information about the program changes and successes through professional meetings and conferences, as well as other appropriate venues. The ultimate measure, however, will be the rates of persistence and success for women-identified, first-generation, Pell-eligible, and URM students.

How does this project support the University Mission and Strategic Objectives?

This proposal will address the following objectives of Goals #4 and #1, and likely the following objective of Goal #3 as well.

> Goal #4: Western will pursue justice and equity in its policies, practices, and impacts.
> > B. Establish, fund and sustain practices of self-examination and continuous improvement to identify, understand, and remediate structural injustices and inequities at Western.
> > C. Enroll, retain, and support more underrepresented and first-generation students at the undergraduate and graduate levels.

> Goal #1: Western will provide a transformational education grounded in the liberal arts and sciences and based on innovative scholarship, research, and creative activity.
> > B. Provide tools and experiences for all students to follow their intellectual curiosity, to work across disciplines, and to develop the skills, knowledge, and habits of mind that will enable them to effectively contribute to evolving societal needs.
> > D. Ensure that all students have access to high quality educational experiences beyond the classroom.

> Goal #3: Western will foster a caring and supportive environment where all members are respected and treated fairly.
> > C. Enhance student services and co-curricular opportunities to foster students' intellectual, personal, and professional development and success.

The strategic goal that this proposal will address most directly and thoroughly is Goal #4, specifically objectives B and C. Funding this position will allow for thorough "self-examination and continuous improvement to identify, understand, and remediate structural injustices and inequities". This will in turn allow the engineering programs to "[e]nroll, retain, and support more underrepresented and first-generation students at the undergraduate" level.

This proposal will also address objective B of Goal #1 by implementing improvements to courses and course sequences that will benefit students in the engineering pre-majors, especially those who are underprepared, even if they do not fall into one of the targeted demographics.

This proposal is also likely to address objective D of Goal #1 and objective C of Goal #3, because research indicates that curricular improvements lead to better student persistence if they are coupled with co-curricular opportunities. While this will be more of a 'phase II' goal, implementing changes that address these two objectives will be an expectation of whomever is hired to fill this position.

What are the consequences of not funding this package?

We run the risk that as interest in the engineering programs increases, and interest has been growing for all three programs, that equity, inclusion, and diversity in the majors will continue to get worse.

What alternatives were explored and why was this alternative chosen?

We considered a number of approaches to assigning or adding a person who or team that can focus on the improvement of pre-major courses and course sequences to address issues of equity, inclusion, and diversity, starting with adding ENGD-SMATE faculty members, but also options such as using existing TN/TT faculty or hiring an NTT faculty member.

The problem with adding ENGD-SMATE faculty members is the cost of adding TN faculty lines without increasing the number of graduates from any of the programs. Proposals we have prepared along these lines have not been able to compete with proposals that include expansion of program graduates, so it is clear that this will not happen anytime soon, yet this issue of attrition for women-identified, first-generation, Pell-eligible, and URM students clearly is a problem that needs to be addressed now.

Using existing Department resources requires taking those resources away from something else, so in effect we would be weakening one or more programs in order to address this issue of attrition of women-identified, first-generation, Pell-eligible, and URM students. Given that the pre-majors feed into the programs, it makes little to no sense to weaken the programs if the goal is to enhance students' long-term chances of success.

Finally, we looked into making this an NTT assignment since the faculty contract now spells out the requirements for non-teaching assignments for NTT. This approach seemed to have good potential, but the work involved is normally assigned to professional staff positions, and we determined it would require 0.333 FTE, which was deemed to be too high of a level for 'other duties' in an NTT contract. Thus, we have reached the conclusion that the best way to begin to implement changes to address issues of student success and equity, inclusion, and diversity is through a part-time professional staff appointment.

Which units (departments, colleges, etc.) will be involved?

Everything will be done inside the Engineering & Design Department in CSE. At this point we do not expect there to be any impact on other departments, colleges, or academic support programs.

Equipment: *(For major (>$25k) purchases, please provide the following information.)*

    Purpose:

    N/A

    Cost:

    N/A

    Anticipated Useful Life:

    N/A

Replacement Cost if any:

N/A

Human Resources (replace example below with needed resources)

A 0.333 FTE Professional Staff appointment.

Operating & Maintenance Costs:

N/A

Space Requirements:

How much new space will be required?

An appropriate office.

Is appropriate space available on campus? ☒Yes ☐No

If no, what space is needed and what features must the space have (e.g., fume hoods, plumbing, 3-phase power, etc.)?

N/A

WESTERN WASHINGTON UNIVERSITY
Director of Pre-Engineering Program Development

	FY19				Future Years Recurring (if different than FY19)			
	Employee FTE	One Time Costs	Recurring Costs	Total Costs	Employee FTE	One Time Costs	Recurring Costs	Total Costs
Faculty Salaries	0.00		$ -	$ -	0.00		$ -	$ -
Professional Salaries	0.33		$ 28,638	$ 28,638	0.00		$ -	$ -
Classified Salaries	0.00		$ -	$ -	0.00		$ -	$ -
Student Salaries (Graduate Assistants, Hourly Student, etc)	0.00		$ -	$ -	0.00		$ -	$ -
Benefits			$ 5,313	$ 5,313			$ -	$ -
Total Salaries & Benefits		$ -	$ 33,951	$ 33,951		$ -	$ -	$ -
Supplies and Materials			$ 500	$ 500				$ -
Professional Service Contracts (please detail below)				$ -				$ -
Equipment and Personal Technology - including new faculty set-up costs		$ 2,000		$ 2,000				$ -
Other Goods and Services (includes memberships, supplies, materials)				$ -				$ -
Total Goods and Services		$ 2,000	$ 500	$ 2,500		$ -	$ -	$ -
Lodging				$ -				$ -
Automobile Rental				$ -				$ -
Air Travel				$ -				$ -
Ground Transportation				$ -				$ -
Other travel costs			$ 4,500	$ 4,500				$ -
Total Travel		$ -	$ 4,500	$ 4,500		$ -	$ -	$ -
Total Expenditures		$2,000	$38,951	$40,951		$0	$0	$0

POSITION TITLE	FY19						Future Years Recurring (if different than FY19)					
	Proposed Annual Salary	Headcount	FTE	Budgeted Salary	Benefits	TOTAL	Proposed Annual Salary	Headcount	FTE	Budgeted Salary	Benefits	TOTAL
Faculty Salaries												
Total Professors	$ -	0	0.00	$ -	$ -	$ -	$ -	0	0.00	$ -	$ -	$ -
Total Associate Professors	$ -	0	0.00	$ -	$ -	$ -	$ -	0	0.00	$ -	$ -	$ -
Total Assistant Professors	$ -	0	0.00	$ -	$ -	$ -	$ -	0	0.00	$ -	$ -	$ -
Total Non Tenure-Track	$ -	0	0.00	$ -	$ -	$ -	$ -	0	0.00	$ -	$ -	$ -
Faculty Salary and Benefit Total	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**
Professional Salaries												
Educational Program Director 2 (EDPD2)	86,000	1	0.33	$ 28,638	$ 5,313	$ 33,951				$ -	$ -	$ -
Exempt Staff Salary and Benefit Total	**$ 86,000**	**1**	**0.33**	**$ 28,638**	**$ 5,313**	**$ 33,951**	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**
Classified Salaries												
Classified Staff Salary and Benefit Total	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**
Student Salaries												
Student Salary and Benefit Total	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**
Total Salary and Benefits - All Positions	**$ 86,000**	**1**	**0.33**	**$ 28,638**	**$ 5,313**	**$ 33,951**	**$ -**	**0**	**0.00**	**$ -**	**$ -**	**$ -**