

Program Review

Action Plan

Engineering Foundations Certificate

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Preamble

As we continue working through the process of program review and renewal we are guided by the college's overarching, interwoven strategic plans, *BUILD 2026*, *Widening Our Doorways*, and *Working Together – the NIC Indigenization Plan*. The action items detailed in the Action Plan align with commitments articulated in the guiding documents and are part of our continued effort to meet the needs of our diverse community of learners.

Action Plan

Overview

In developing the Action Plan the faculty in the Math and Science department involved in the engineering program has consulted the three strategic plans to ensure alignment with the vision outlined within. As well, realistic timelines have been determined to achieve the action items presented given their alignment with institutional goals, resource availability, and need.

Implementation Plan

Starting in fall of 2023, the members of the Math and Science department who have some responsibility for courses in the engineering program will meet once a semester (or as needed) to update progress on stated action items. Hopefully there will be some support from CTLI to facilitate some of the action items, but much of the facilitation responsibility will still fall to the chair of the department. Considerable support from a variety of individuals will be required to successfully achieve desired outcomes. In the long run, it is expected that a meeting, communication, and ongoing review process will become routine.

Accountability Plan

All of the short term goals have an individual, or group individuals, identified who will be responsible for seeing the action item through to its conclusion. While others may be involved in the ongoing work, this individual is responsible for coordinating all efforts and moving the task forward. The instructional group formed as one of our Action Items, and planning to meet at least twice per academic year, will include discussion of our progress on the Action Plan as part of the group's agenda. Each assigned individual will be required to provide a formal update when the one-year follow-up report is written.

Resourcing the Plan

The complexity and priority of any particular action item will dictate the resources needed to reach the desired outcome. In our opinion the program needs a program coordinator. At this point there are no funds available, but we are hopeful that in the years to come we can work towards that goal. Once that has been achieved a lot of the action items can be taken on by that program coordinator.

Gantt Chart

A Gantt Chart has been created to outline all the action items.

SHORT-TERM ACTION ITEMS (To be completed within a year): Engineering Foundations Certificate

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
	<i>What do you want to achieve? What is the expected timeline to reach this objective (i.e., short-term, medium-term, long-term)?</i>	<i>What actions will be taken to achieve desired outcome?</i>	<i>What final report recommendation was this desired outcome derived from?</i>	<i>Who will be responsible for leading this action?</i>	<i>Month/year</i>	<i>Month/year</i>	<i>What resources will be required to complete this action? (e.g., money, software, consultants, equipment)</i>	<i>How will you track the implementation of your action?</i>	<i>How will you know that you have achieved your desired outcome?</i>
1	Create a ToR for Program Advisory Committee	Create terms of reference document for committee.	Learning Community S1, E29	Dennis Lightfoot with input from others	05/23	05/23	Time		Finalized Terms of Reference document.
2	Create a Program Advisory Committee	Create terms of reference document for committee. Make connections with local industry, local first nations, school district, and create advisory group (also to include representation from receiving institutions on the island)	Learning Community S1, E29	Dennis	06/23	10/23	Faculty time, Travel, Resources to host meetings with advisory group on campus	Finalized Terms of Reference document. List of contacts made, individuals interested in being on advisory board	First meeting of advisory board in fall of 2023

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
3	Update Program Learning Outcomes and Admission Requirements	Draft program revision documents for curriculum committee and education council, shepherd the documents through the approval process.	Commitment to Learners S9, E15, E24, E25 Program Structures E1, E7	Dennis Lightfoot, Alex Blair	09/22	05/23	Faculty time, Approval of Dean, Curriculum Committee and Education Council	Track approvals of department chair, dean's office, curriculum committee, and education council	Revised documents have been adopted by Education Council, and will appear in college calendar.
4	Revise the outcomes, content, credits, and hours of ENR 100 and 101 to more explicitly meet the requirements of the CFYEC to give broader transferability of program. Also add content early in term to ENR 100 on pathway alternatives within the program, inclusion and working in diverse teams, intercultural skills and competencies, indigenous protocols.	Draft course revision documents for curriculum committee and education council, shepherd the documents through the approval process.	Commitment to Learners E3, E4, E21 Practices E28, E32	Dennis	05/23	05/24	Dennis's time Dean's approval, Approval of Curriculum Committee and Education Council	Tracking of approval of curriculum documents	Revised curriculum is in the academic calendar

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
5	<p>Get accurate Engineering student numbers</p> <p>Find a way to determine yearly 'head count' (including undeclared and/or students who plan to transfer out of province)</p>	Work with research and planning and advising to better capture student numbers ("who could have graduated but didn't apply?" "how many students did the courses they needed to go out of province?")		Jennifer Fallis-Starhunter	09/23	05/24	Research and Planning		Representative numbers on the amount of students that are at NIC with an interest in Engineering
6	Make connection with teachers, counselors and students in local high schools	Arrange meetings with teachers and counselors first, then make presentations in classes at all area high schools	Connection to Learners E20, E30	Faculty, Dep Chair in consultation with Recruitment	09/23	Ongoing	Recruiter time Faculty time Travel?	Maintain log of site visits to high schools by faculty members	Relationship established between high school teachers and counselors and NIC engineering faculty.
7	Create a Program Instructional Group	Meet at the end of winter term and the start of fall term to discuss pedagogy, content, and major assessment due dates.	Practices E26, E39 Learning Community E29	Department Chair	09/23	Ongoing	Coordinator time Faculty time	Maintain minutes of the meetings	Minutes of meetings, action items for instructional members

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
8	Create a shareable document to promote the program	Work with Marketing to make a shareable document to promote the program	Program Structures E5, E6	Dennis, Chair Marketing with input from faculty	10/23	Ongoing, should be updates yearly	Consultation with Marketing Team and Program Coordinator	Drafts of document shared between marketing and Program Coordinator	Minutes of meetings, action items for instructional members Document/Poster
9	Work with recruiters and advisors to make sure that incoming and potential students are getting consistent and correct information on which program / pathway is best for them	Meet with recruiters and advisors Help create informative up-to-date brochures for recruiters and advisors (See action #8)	Commitment to Learners E15 Program Structures E2, E7	Dennis, Chair	09/24	Ongoing annually	Faculty and chair time and advisors and recruitments time		Yearly meeting with those interested parties
10	Having clear resources such as a poster and/or other visual tool showing all pathway options and their interconnections to demonstrate a common message within areas at NIC (advising, recruiting etc.), and for its prospective and current students	Develop a shareable poster and/or other visual tool showing all pathway options and their interconnections (See action #8)	Program Structures E5, E6	Dennis, Chair, Marketing with input from Faculty	10/23	03/24	Marketing and design time and experience	Correspondence between program faculty and marketing, including drafts of documents.	A visual representation of the Engineering pathway option for use in advising and recruitment

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
11	Get Funding to run a feasibility study for a 2-year diploma	Apply through program renewal process for some funds	Program Structures E16, E33 Practices E36	Dep Chair with input from faculty	05/23	03/25	Program Renewal Funding		Having funding available
12	Request reserved housing for Engineering Students	Talk to StudentLife and ask about possibility of having designated rooms for the Engineering Students		Dep Chair	05/23	09/24			Reserved spots in housing
13	Explore the possibility of getting priority seating for Indigenous Students	Consult with Kelly Shopland, Registrar		Dennis, Chair	05/23	06/23	Indigenous Education, Registrar time		Reserved seats for Indigenous students

MEDIUM-TERM ACTION ITEMS: Engineering Foundations Certificate

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
	<i>What do you want to achieve? What is the expected timeline to reach this objective (i.e., short-term, medium-term, long-term)?</i>	<i>What actions will be taken to achieve desired outcome?</i>	<i>What section of one of the three strategic plan documents does this align with?</i>	<i>Who will be responsible for leading this action?</i>	<i>Month/year</i>	<i>Month/year</i>	<i>What resources will be required to complete this action? (e.g., money, software, consultants, equipment)</i>	<i>How will you track the implementation of your action?</i>	<i>How will you know that you have achieved your desired outcome?</i>
1	Build initial connections with local Indigenous Communities	Connect with Kelly Shopland (and Elders/Indigenous navigators ?)	Commitment to Learners E30 Program Structures S3, E45 Learning Community E27, E29	Dennis	09/23	Ongoing	Coordinator time Travel?	Establish and update a list of contacts	Have Indigenous participation on the Program Advisory Committee, Indigenous advisor to program instructional group to help indigenize curriculum
2	Creation of option co-op designation (and co-op course) for all engineering programs	Develop co-op courses with input from UVic to ensure transferability, shepherd new course through curriculum committee and education council, build network of connections to help connect students with employers	Learning Community E10	Dennis instead of teaching intersession Sp 2024	05/23	05/25	Dennis Lightfoot instead of teaching intersession, Approval of Dean Approval of SET Approval of Curriculum Committee and Education Council In cooperation with Anita Budisa-Bonneau	Tracking of approval of curriculum documents, list of employer contacts	Co-op designation and courses are in the academic calendar and co-op started summer of 2025

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
3	Work towards the creation of an Engineering Program Coordinator Position	Give a faculty member a release in fall and winter terms to take on the program coordinator role	Program Structures E11 (and a required step to implement other recommendations listed below)	Dean and/or Associate Dean	09/23	Ongoing	Release time	Conversations with the Dean's office	Get tangible goals that need to be achieved to be able to create such a role (ie, certain amount of students enrolled, etc)
4	Microcredentials	Develop microcredentials that either lead into an Engineerings Certificate after or can be taken as stand out items		Dennis, Chair, Dean	05/23	ongoing	Support from Dean's office and ministry funding	Monthly check ins	A microcredential is getting offered
5	Real-life experience of a project on campus	Involve students in the Raven lab renovation and/or student housing project.	Program Structures E40 Learning Community E27	ENR 100/101 instructor	09/23	Ongoing	Faculty in consultation with Facilities		Students have been involved in the process
6	Better engagement with Community through EGBC	Support an engineering challenge with EGBC or start our own challenge	Learning Community E41, E42, and E44	Dennis	09/23	Ongoing			EGBC and NIC collaborating on events
7	Course development to facilitate more course		Practices E31	Faculty	09/23	05/25	Dean's approval, funding for CD		

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
	delivery options (hyflex, distance, etc.)								
8	Dual Admission to VIU's Integrated Technologist Diploma	Develop dual admission or dedicated pathway option for students to transfer to VIU's Integrated Technologist Diploma program.	Program Structures E17	Dennis, Dean's office	09/23	05/25	Consultation with Dean's office , Consultation with VIU, Consultation with Program Coordinator		Existing Dual Admission Pathway
9	MakerSpace for Engineering students	Make sure a MakerSpace for Engineering Students is getting provided. Ideally in the Raven building	Learning Community E34	Dean's office	09/23	05/25	Program Coordinator, Consultation with Dean's office, Consultation with Facilities		
10	Update Program Learning Outcomes, mapping of courses		Commitment to Learners S9, E15, E24, E25 Program Structures E1, E7	Dennis, Chair	09/23	05/25	Faculty time, Approval of Dean, Curriculum Committee and Education Council	Track approvals of department chair, dean's office, curriculum committee, and education council	
11	Creation of a two-year diploma option (for FEC or DAP) specifically for transfer to UVic	Complete feasibility study, propose new program to curriculum	Program Structures E16, E33 Practices E36	Dennis	09/23	05/25	Coordinator time Approval of Dean Approval of SET	Feasibility study completed and accepted by SET, tracking of approvals	New diploma is in the academic calendar

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
		committee and education council. Review with OGE the need of international students to have a two year diploma					Approval of Curriculum Committee and Education Council	of proposed curriculum	

LONG-TERM ACTION ITEMS: Engineering Foundations Certificate

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
	<i>What do you want to achieve? What is the expected timeline to reach this objective (i.e., short-term, medium-term, long-term)?</i>	<i>What actions will be taken to achieve desired outcome?</i>	<i>What section of one of the three strategic plan documents does this align with?</i>	<i>Who will be responsible for leading this action?</i>	<i>Month/year</i>	<i>Month/year</i>	<i>What resources will be required to complete this action? (e.g., money, software, consultants, equipment)</i>	<i>How will you track the implementation of your action?</i>	<i>How will you know that you have achieved your desired outcome?</i>
1	Develop an ongoing feedback system to keep international students engaged with NIC.		Learning Community E35	Program Coordinator in collaboration with OGE	09/23	Ongoing			

#	Desired Outcome	Actions	Recommendation Reference	Lead Person(s)	Start Date	End Date	Resources	Monitoring	Results
2	Explore “off-sequence” MAT 181 and MAT 182		Practices E32	Department Chair, Faculty	11/23	Ongoing			
3	Explore making/keeping a vetted list of external tutors in the community		Practices E36	Program Coordinator, Faculty	01/24	Ongoing			

