

Ongoing Improvement Progress Report

Instructions and Report Template

As part of the protocols outlined in Western's Institutional Quality Assurance Process (IQAP), to facilitate the continuous improvement of academic programs between review cycles, in connection with the Final Assessment Report (FAR) and Implementation Plan, a monitoring process will include an Ongoing Improvement Progress Report. The outcomes of this report will be considered as part of the program's next cyclical review.

The purpose of this report is to provide an update on the operationalization of the implementation plan following a Cyclical Program Review (or the review of a New Program). This should include a brief summary of actions taken by the Program and the Dean's Office since the completion of the review (usually about three years), as well as an update on the stage of implementation for all applicable items. These include:

- whether the action item(s) are in progress, complete or no longer applicable (with a brief explanation);
- the timelines of each item and how they are progressing or expected to progress, particularly if they are diverting from original timelines in the FAR and Implementation Plan, and;
- a short description of any other program developments and improvements that have taken place following the review.
- For new programs only, an evaluation of the initial administration and resourcing of the program.



The following report template has been created for the program to report on progress made regarding recommendations presented in the Implementation Plan, and any other relevant program developments and enhancements.

- The program will complete the template and submit it to the faculty Dean's Office for sign-off.
- The program will then submit the completed Ongoing Improvement and Progress Report to the Office of Academic Quality and Enhancement (OAQE). Reports are due by June 30.
 - The OAQE will present all Ongoing Improvement and Progress Reports to SUPR-U/G for approval. Approvals, or any follow-up questions/concerns, will be communicated to the program and Dean's Office by the OAQE.
 - It should be noted that as per the requirements of the province's Quality Council, progress reports will be posted on the [reports page](#) of the OAQE website.

Ongoing Improvement Progress Report

Statistics & Actuarial Sciences, BSc / Faculty of Science

Program	Statistics & Actuarial Sciences, BSc	Faculty / Affiliated University College	Faculty of Science
Approval Dates of the Review	SUPR-U: January 20, 2021 SCAPA: February 3, 2021 Senate: February 12, 2021	Year of the Next Review	2027-2028
Link to the Programs Final Assessment Report (FAR)	https://www.uwo.ca/pvp/vpacademic/iqap/academic_programs/iqap_reports/science_undergrad/2020%20Statistics%20and%20Actuarial%20Science%20Program%20Review.pdf		
If applicable, submission of follow-up report(s)	<i>Not applicable</i>		

	Name	Signature	Date
Program Chair/Director	Hao Yu		July 4, 2023
Dean (or delegate)	Ken Yeung, Associate Dean (Academic)		July 4, 2023

Progress Update on the Implementation Plan

Recommendations #1, 2	Proposed Action and Follow-up	Responsibility	Timeline
<p>Recommendation #1 Ensure strong communication skills across all programs.</p> <p>Recommendation #2 Computer skills: ensuring sufficient and coherent exposure throughout the degree program</p>	<p>Review program curricula; assess student performance and suggest curriculum revisions as appropriate</p>	<p>Department Chair</p>	<p>July 2022</p>
<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially</p> <p>If no, or partially, is implementation on schedule with the timeline? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>Progress</p> <p><i>What specific actions have been taken?</i></p> <p>For Recommendation #1:</p> <p>We are constantly keeping in touch with representatives from each of our program modules: Actuarial Science, Statistics, Financial Modelling, and Data Science. The most important aspects are the course revisions to reflect changes of course requirements such as adding/dropping pre/anti-requisites; removing outdated statements.</p>			

Another one is to constantly revise our four modules either for Honours, Major, or Minor: some selective courses become required ones such as Stats 4861: Time Series for Actuarial Science Honours (a requirement from Actuarial Society of Canada); adding additional selective courses to modules; dropping some core course requirements for Data Science modules in Minor or Certificate (to attract students from social sciences).

We are also constantly getting feedback from our departmental Academic Counselors such as conflicting course requirements; missing some anti-requisites; some senior students coming back to take junior level courses, etc. Based on their feedback, we revise our courses/modules accordingly.

We are getting some feedback from Faculty's Academic Counselors for some unusual selections of courses took by pre-medical students. For example, Stats/Biology 2244 is a required course for pre-medical students. Some of them after taking it came back to take Stats 2037 which is designed for health science students only and is equivalent to Stats 1023. We are working on this revision by adding anti-requisites Stats 2244 to Stats 2037 and other necessary changes.

For Recommendation #2:

We have 2nd year course Stats 2864: Statistical Programming (R language) which is required for our four modules in Honours; as well as some modules in Major or Minor. We are also offering 4th year course Stats 4864: Advanced Statistical Programming (R language) as a selective course for senior students. Beyond R language, we offer Python language-based courses such Data Science 2000 so that our students can experience both R and Python languages. We believe that our department offers very rigorous training on programming languages at junior level courses which will give students an edge later on for taking senior courses that require R or Python.

On the computer hardware side, we are building a cloud service to provide computer resources online though we leave three PCs in our computer lab.

Next Steps (if applicable)

We are still constantly revising our modules as well as courses to reflect changes/requirements: some are within the department; some within Faculty of Science; some from Main Campus or King's University College.

We are working on an exit survey for our graduates to study job market trends or new requirements/trends that can help us to revise our program.

Additional Comments

If applicable

Recommendations #3, 4, 5	Proposed Action and Follow-up	Responsibility	Timeline
<p>Recommendation #3 Gather information from graduates to assess the success in meeting PLOs</p> <p>Recommendation #4 Review and update curriculum maps to inform program and course design.</p> <p>Recommendation #5 Conduct a planning exercise to identify potential initiatives within and external to Data Science to maintain quality of the program.</p>	<p>Establish a formal annual review process to collect, analyze and review student performance data in order to inform curriculum changes</p>	<p>Department Chair</p>	<p>Ongoing</p>

Recommendation Implemented

Yes No Partially

If no, or partially, is implementation on schedule with the timeline? Yes No

Progress**For Recommendation #3:**

We are working on an exit survey for our graduates to study job market trends or new requirements that can help us to revise our programs. For example, Actuarial Society of Canada changes its credited program to include Time Series as a required component. We change our Actuarial Science module in Honors accordingly.

For Recommendation #4:

We implemented a set of flow-charts for each module and posted them on our departmental website. Those flow-charts provide convenient paths for students to take proper courses each year in their corresponding modules. Those flow-charts are constantly updated due to changes/revisions of our modules.

We are working on a new course that can be offered to both Data Science and Financial Modeling students.

For Recommendation #5:

A new hiring process is under way for a tenure-track position in Data Science which will enhance our Data Science program. Will work with Data Science group to check any issues related to modules. Will also get feedback by conducting a survey on Data Science students/alumina: what is good about our Data Science program; what is needed for improvement, etc.

Next Steps (if applicable)**Additional Comments**

If applicable

Note: The total number of expandable text boxes will be dependent on the number of prioritized recommendations appearing in the program's most recent Final Assessment Report (FAR).

Continuous Program Enhancement

What additional initiatives or changes has the program been working on in relation to continuous program improvement?

Have more resources/opportunities for our internship program. Need to streamline processing of students' appeals: standard format, reasoning, templates for answering, etc. Similarly, streamline processing of scholastic offense cases.