

# ENCQOR Technology Development (Academic) Program

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## Program Information and Eligibility Requirements

### Program Overview and Benefits

The Technology Development (Academic) Program partners researchers at Ontario-based post-secondary institutions with **ENCQOR 5G Anchor Firms** on 5G technology development projects. Areas of research interest are defined by Challenge Statements submitted to OCI by the ENCQOR 5G Anchor Firms and posted to the OCI website on a rolling basis.

To be notified of Technology Development (SME and Academic Streams) Program Challenge Statements as they launch sign up for the **ENCQOR Ontario mailing list**.

The Technology Development (Academic) Program supports collaborative technology development projects to develop, integrate, test or validate pre-commercial technologies for the iPaaS testbed.

The Technology Development (Academic) Program is delivered by OCI in partnership with Innovation ENCQOR on behalf of the Ontario Ministry of Economic Development, Job Creation and Trade and the Federal Government through Innovation, Science and Economic Development Canada.

Benefits to Companies	Benefits to Post-Secondary Institutions
<p>ENCQOR 5G Anchor Firms:</p> <ul style="list-style-type: none"> <li>• Gain access to new talent</li> <li>• Develop relationships with researchers to support iPaaS and 5G technology development</li> <li>• Gain access to unique facilities and research equipment available in publicly-funded post-secondary institutions</li> <li>• Create marketable solutions to current industry challenges</li> <li>• Increase productivity, revenue and jobs</li> </ul>	<p>Principal Investigators</p> <ul style="list-style-type: none"> <li>• Access exciting research and development challenges with market pull</li> <li>• Establish relationships with ENCQOR 5G Anchor firm companies- global market leaders in the sector</li> </ul> <p>Students:</p> <ul style="list-style-type: none"> <li>• Leverage knowledge and innovative ideas to solve industry problems</li> <li>• Gain real-world experience</li> <li>• Build relationships with established companies</li> <li>• Gain access to OCI's industry and entrepreneurial networks</li> </ul>

## How Funding Works

OCI Contribution	100% of total <b>eligible project costs</b> , maximum to be defined in the posted Challenge Statement
Industry Partner Contribution	Not Applicable
Example	--
Funding Recipient	Publicly-funded post-secondary institution in Ontario
Institutional Overhead	Institutional overhead must be calculated and included as a budget line item if applicable. Academic overhead cannot exceed 10% of eligible project costs.

## Eligibility Requirements

### Applicant

- Principal investigator at an accredited, publicly-funded Ontario university, or applied research officer at an accredited, publicly-funded Ontario college (additional primary researchers must be listed as team members in the application)
- Adjunct professors may be eligible on a case-by-case basis. At a minimum, the adjunct professor must: 1) actively conduct research at an Ontario institution, 2) be allowed by the institution to hold a grant and given an institutional account, and 3) be allowed to supervise students
- The applicant must have an arms-length relationship with the ENCQOR 5G Anchor Firm Partner defined in the Technology Development (Academic) Challenge Statement for which they are applying
- Applicants must be in good financial and reporting standing with OCI
- Applicants must be willing to co-operate in providing project and outcomes metrics
- Applicants must be willing to execute a non-disclosure agreement (NDA) with the ENCQOR 5G Anchor Firm Partner defined in the Technology Development (Academic) Challenge Statement for which they are applying
- Applicants must be willing to undergo the procurement process of the ENCQOR 5G Anchor Firm Partner defined in the Technology Development (Academic) Challenge Statement for which they are applying
- Applicants must be willing to enter into a funding agreement with OCI and Innovation ENCQOR
- Applicants must be willing to enter into a separate agreement with the ENCQOR 5G Anchor Firm Partner defined in the Technology Development (Academic) Challenge Statement for which they are applying
- Additional Applicant eligibility requirements may vary by Challenge Statement.

### ENCQOR 5G Anchor Firm Partner

- Project Partners must be one of the Ontario **ENCQOR 5G Anchor Firms** (Ciena, Ericsson, Thales)
- Partners are defined in the posted Challenge Statement

### Project

- Projects must be developed in response to an active Technology Development (Academic) Challenge Statement
- Areas of technology interest and expected project outcomes will be defined in the Technology Development (Academic) Challenge Statement
- Projects must be between 12-24 months in duration. Expected project timeline will be defined in the Technology Development (Academic) Challenge Statement.

- All Technology Development (Academic) Challenge Statements and projects developed in response to these Challenge Statements must drive the development, integration, testing or validation of pre-commercial technologies with a link to the Innovation Platform as Service (iPaaS) testbed.
- Project activities may vary from R&D to later stage validation- expected technology readiness level of the solution technology may vary by Technology Development (Academic) Challenge Statement but must be within TRL levels 1-7.
- Projects should show a clear fit with the industry priorities outlined in the Technology Development (Academic) Challenge Statement and show strong potential for commercial impact on the ENCQOR 5G Anchor Firm Partner.
- The ENCQOR 5G Anchor Firm Partner must be able to utilize the results of the project for the economic, environmental or social benefit of Ontario. This includes direct economic benefit to the Anchor Firm (e.g., new jobs, increased revenue, increased productivity, cost savings), and/or indirect economic benefit to other members of the value chain, partners, or industry in Ontario (e.g. job creation, capacity building, strategic benefit). Contribution to the training and industry exposure of Highly Qualified Personnel (HQP) at the company is also a desired element.
- Intellectual Property (IP) arising from the project will be managed by the project participants as OCI does not claim or manage IP rights. Successful applicants and the ENCQOR 5G anchor firm(s) must execute OCI's standard funding agreement, including an executed Schedule D, Intellectual Property Term Sheet (for example, in the form of a Collaborative Research Agreement), within 30 days of notification of approval.

## How to Apply

Program Status: **Closed for applications**

Expressions of Interest (EOIs) may be submitted in response to an active Technology Development (Academic) Challenge Statement. Challenge Statements will be posted on a rolling basis on the OCI website.

To stay up to date with active Technology Development (Academic) Program Challenge Statements please sign up for the [ENCQOR 5G Ontario mailing list](#) or follow ENCQOR Ontario on [Twitter](#).

EOI Deadlines will vary by Technology Development (Academic) Challenge Statement and will be posted at the time that the Challenge Statement is released. Challenge Statements will be posted to the OCI website for a minimum of four (4) weeks.

1. If you are ready to start applying for the Technology Development (Academic) Program, the applicant (from the post-secondary institution) should click the button below to start the application process. Please note: completion of this form does not constitute an application for funding. An OCI Business Development Manager (BD) will contact you within two business days to discuss the opportunity. If you are already working with an OCI BD, please indicate this in the form.
2. Once the BD confirms that the opportunity is suitable for the program, you will be sent a link to OCI's online application system, AccessOCI.
3. Complete the online Expression of Interest. If you have any questions about the Challenge Statement content or require clarification please reach out directly to Natalia Lobo ([NLobo@oc-innovation.ca](mailto:NLobo@oc-innovation.ca)) and a response will be obtained from the program contacts at the ENCQOR 5G Anchor Firm.

For assistance, please see the following resources:

- a. Sample EOI application form (for reference purposes only)
- b. [OCI's Knowledge Base \(Frequently Asked Questions\)](#)

4. All submitted EOIs will undergo an initial internal review by OCI for eligibility and application completeness. At this stage applications may be returned to the applicant to correct or clarify eligibility criteria.
5. EOIs will be reviewed by the ENCQOR 5G anchor firm for fit against the Challenge Statement they developed. These reviews are submitted to OCI to finalize the application review. The OCI Internal Review Panel makes the final decision on projects to be invited to submit a full application.
6. At the time of notification of invitation to develop a full application, successful applicants will gain access to the full application module in AccessOCI to complete their full application. **Applicants will have approximately four (4) weeks to complete their full application for OCI.**
7. At the full application stage the ENCQOR 5G Anchor Firm will be involved in application development as an active partner.
  - a. At the time of invitation to develop a full application an introduction will be made to team at the ENCQOR 5G Anchor Firm that posted the Challenge Statement and key contacts will be added to the application module to allow access to the application content.
  - b. Applicants will be invited to execute a non-disclosure agreement (NDA) with the ENCQOR 5G Anchor firm. This will allow the partners to share further detail about the challenge statement and project expectations.
  - c. As part of the two-step agreement process (detailed on the 'Project Activation' tab) the applicant will be expected to develop a Statement of Work with the Anchor Firm partner including a detailed project plan and agreement on intellectual property terms.  
**All applicants are encouraged to start negotiation with the ENCQOR 5G anchor firm(s) regarding intellectual property (IP) terms soon after their invitation to develop a full application**
  - d. At the full application stage the applicant will be required to provide a 'Letter of Interest' from their ENCQOR 5G Anchor Firm Partner as an attachment to the full application. This letter is a set template which confirms the Anchor Firms active engagement in application development and alignment with application content. A signed 'Letter of Interest' is a mandatory requirement for the full application to proceed to review.
8. Complete the online Full Application forms on AccessOCI.  
Required supporting documents:
  - Resumes/CVs from relevant team members
  - Letter of Interest from the ENCQOR 5G Anchor Firm

For assistance, please see the following resources:

- Sample full application form (for reference purposes only)
- [OCI's Knowledge Base \(Frequently Asked Questions\)](#)
9. Request your OCI BD to provide an endorsement of the application. The endorsement must be requested at least one week prior to the Challenge Statement Deadline. Once the BD endorsement is provided, a submission button will become visible and the applicant or BD will then be able to submit the application.
10. All submitted applications will undergo an initial internal review by OCI for eligibility, application completeness and eligible expenses. A list of any deficiencies will be sent to the applicant for revision.
11. Once the application is deemed complete, it will proceed for assessment of the full application.

## Assessment Process and Criteria

Technology Development (Academic) Program is a discretionary, non-entitlement program with limited funding. All eligible projects are assessed on their merit and undergo a review process against program objectives and assessment criteria.

Applicants must work with a Business Development Manager throughout the application process.

Technology Development (Academic) Program is a two-step application process including EOI and Full Application stages.

### Step 1: Expression of Interest (EOI)

OCI will issue Technology Development (Academic) Program Challenge Statements on a rolling basis on the OCI website. Applicants can apply for funding to execute a project in response to an ENCQOR 5G Anchor Firm-defined Challenge Statement by submitting an EOI.

All submitted EOIs will undergo an initial internal review by OCI for eligibility and application completeness. Subsequently, EOIs will be reviewed by the ENCQOR 5G anchor firm(s) for fit with the Challenge Statement. Anchor Firms will submit their recommendations to OCE. The OCE Internal Review Panel will make the final decision of applications to be invited to submit a full application.

Preference will be given to EOIs that,

- Address ENCQOR 5G anchor firms' problem statement and needs;
- Demonstrate applicability and benefit to the specified 5G technology, leading to novel, newly-adapted or adopted processes, products, or services that will keep the iPaaS testbed cutting edge;
- Demonstrate innovation in the context of current technical and commercial developments;
- Demonstrate appropriate skills, resources and methodology for completing the project;
- Demonstrate a close ENCQOR 5G anchor firm-post-secondary institution collaboration;
- Demonstrate opportunity for HQP training, including graduate students;
- Are highly likely to be commercialized/implemented and generate economic benefit for Ontario; and
- Anticipate tangible deliverables in the form of new technologies, new processes, significant skills transfer, job creation, or other benefits to society.

### Step 2: OCI full application - Invitation Only:

Selected EOI applicants will be invited to submit a full application. Full applications will undergo an internal review for completeness and eligible expenses. Following confirmation by OCI of application completeness applications will undergo review by OCI's Subject Matter Director.

For applications submitted by colleges, representatives of the Ministry of Training, Colleges and Universities (MTCU) may be included in the external review process, as required, to assess the project's degree of support of the college's approved Strategic Mandate Agreement (SMA).

Recommendations will be reviewed by OCI's Internal Review Panel, which will have responsibility for the final funding OCI decision.

Full applications will be evaluated based on assessment criteria, which include but are not limited to:

- Clarity of the significance of the opportunity, and expected economic benefit to the ENCQOR 5G Anchor Firm company and Ontario (e.g. new revenues, job creation/retention, productivity improvements)
- Ability of the innovation to address the ENCQOR 5G Anchor Firm challenge
- Expertise and experience of the team members, clarity of roles and responsibilities, and evidence of collaboration
- Clarity, feasibility and appropriateness of the project plan and budget
- Evidence of next steps, and clear strategy and capacity to bring the results to market and/or implement at the ENCQOR 5G Anchor Firm company
- Overall quality and completeness of the application

## Flow of Funds and Project Administration

### Project Activation

After the full application is approved for funding by OCI the Applicant Institution will receive a notification letter from OCI outlining next steps and inviting them to execute two (2) agreements.

### Anchor Firm Agreement

Prior to execution of the final funding agreement with OCI/Innovation ENCQOR 5G the Applicant Institution must have an agreement with the ENCQOR 5G Anchor Firm. This agreement will define a detailed statement of work and formalize the terms of the collaboration between the Applicant Institution and Anchor Firm Partner.

As part of this process the applicant Institution will be expected to undergo a procurement process with the ENCQOR 5G Anchor Firm. This process will vary by ENCQOR 5G Anchor Firm Partner and may vary by Challenge Statement.

Requirements may include: negotiations around intellectual property or other requirements as defined by the ENCQOR 5G Anchor Firm.

**Applicant institutions and ENCQOR 5G Anchor Firms are highly encouraged to start discussions on the Anchor Firm procurement process expectations as soon as possible after the applicant institution has been invited to submit a full application. Early discussions will ensure that both parties are aware of the expectations and requirements for this process and help to accelerate the contracting process if the project is approved.**

**Applicant institutions and ENCQOR 5G Anchor Firms are also encouraged to develop the Anchor Firm Professional Services Agreement Statement of Work (SOW) in parallel with the full application to ensure that there is consistency between the full application content and SOW deliverables.**

OCI is not a signatory on the agreement between the ENCQOR 5G Anchor Firm and the Applicant Institution should not be included in the procurement process or partnership negotiations.

When the agreement between the Applicant Institution and the ENCQOR 5G Anchor Firm has been executed the Anchor Firm will provide documentation to OCI as confirmation. The Anchor Firm will provide a summary of the Statement of Work as well as a statement regarding the intellectual property agreement between the ENCQOR 5G Anchor Firm and the Applicant Institution to be incorporated as a schedule of OCI/ Innovation ENCQOR Funding agreement.

If the ENCQOR 5G Anchor Firm and the Applicant Institution are unable to execute an agreement or if the Anchor Firm Agreement Process causes a significant delay in project activation OCI may consider not awarding the project.

### OCI/Innovation ENCQOR Funding Agreement

When OCI receives confirmation that the Anchor Firm Professional Services Agreement has been executed the OCI and Innovation ENCQOR Funding agreement will be generated. The OCE/Innovation ENCQOR funding agreement sets out the funding and reporting terms for the project.

A copy of the [OCI/Innovation ENCQOR trilateral funding agreement](#) is available for download. Applicants are encouraged to review this document early in the application process. OCE/Innovation ENCQOR will not negotiate or make changes to the funding agreements.

When all three parties execute the funding agreement the project will be activated and the project status will change in the AccessOCE system to 'Active'.

### Flow of Funds

The Technology Development (Academic) Program is funded by both the Ontario Ministry of Economic Development, Job Creation and Trade and the Federal Government through Innovation, Science and Economic Development Canada. Projects funded through the Technology Development Program will receive funding from both levels of government through the claims and reimbursement process administered by OCI.

The Technology Development (Academic) Program does not advance project funds to institutions upon activation.

Project funds will be disbursed based on Interim Progress and Claims Report(s) submitted to OCI at the following intervals:

Interim Progress and Claims Report 1	3 months after project activation date
Interim Progress and Claims Report 2	6 months after project activation date
Interim Progress and Claims Report 3	12 months after activation date
Interim Progress and Claims Report 4	18 months after activation date
Final report	Project end date

If a project timeline is shorter than two years the number of biannual interim progress and claims reports after Interim Progress and Claims Report 2 will be reduced to reflect the duration of the project timeline.

The remainder of project funds will be disbursed based on reimbursement claims submitted to OCI on a biannual basis. Reimbursement claims will include a report on project related expenses and supporting documentation. Project spending will be tracked and compared to the budget submitted with the full application. When a project is activated the Applicant Institution will receive an orientation on claims reporting.

OCI will keep a 10 per cent hold back on all project funding to be released on approval of the final project report.



## Use of Funds

Generally, OCI funds will support salaries and operating costs to achieve milestones. Capital costs are not eligible expenses.

For a full list of eligible expenses please refer to the [eligible project expenditures document](#).

## Project Reporting Requirements

The following project reports will be required.

**Please note that to receive funding from OCI, the applicant MUST complete all required reports as a contractual obligation.**

### Interim Progress and Claims Report(s)

Interim progress and claims report(s), including progress, proof of expenditures, financial attestation, and a request for reimbursement may be submitted three months after project start, six months after project start and every six months until the project end date.

Copies of detailed [Reporting Instructions](#) will be sent to successful applicants at the time of contracting. The report must be received and approved by OCI and Innovation ENCQOR prior to release of funds for eligible claims.

**Note: Applicants MUST retain all proof of purchases, receipts, and other relevant documentation relating to eligible expenses. These should be included in the Interim Progress and Claim Report.**

### Final Reports

Forty-five (45) days prior to the scheduled completion date, the Applicant and industry partner will receive a notification of the project end date from OCI's AccessOCI system, with a link to the Final Project Report, should the Applicant or Project partner wish to begin entering data. If an extension to complete the project is required, the Applicant must request it prior to the scheduled project completion date, using the Project Administration tab in their AccessOCI project file. A maximum extension of three months will be allowable.

On the scheduled project completion date, the Applicant and Project partner will receive notification and a link to complete a Final Project Report (including progress, financials and metrics) from OCI's AccessOCI system. Both the Applicant and Project partner reports must be received and approved by OCI within 30 days of project completion.

When the Applicant and Project partner final reports have been approved, the post-secondary institution will be required to complete an attestation of the use of funds to close the project.

All required final reports by all partners must be submitted within 30 days of project completion in order to release the holdback and maintain good financial standing with OCI.

### Project Metrics

If the project continues past a fiscal year-end (March 31), the Applicant and Project Partner will be required to complete an annual Metrics survey each April, for the part of the project that has been completed since the previous March 31.

This annual report is mandatory for OCI to fulfil its contract with its funding Ministries. Required metrics reports from all partners must be submitted in order to maintain good financial standing with OCI.

### Retrospective Survey

At one, two, and three years after project completion, the Project Partner will be sent a link to complete a retrospective survey to collect data on commercial outcomes from the project. This information is required by OCI for assessment of program impact and continuous improvement.

### Project Changes

The applicant must contact the Program Manager for any material change in the project, including, but not limited to, changes related to the project's principal investigator, the industry partner, scope of work or eligible expenses, when they are identified.

For any variances to the OCI budget of \$5,000 or greater, or extensions to the project end date, the applicant must complete a Project Change Request form prior to the project end date, using the Project Administration tab in their AccessOCI project file.

### Contacts

[Search OCI's Knowledge Base of Frequently Asked Questions.](#)

**For program-related inquiries, including assistance with deadlines and applications, please contact:**

**Natalia Lobo**

Program Manager

[Email: NLobo@oc-innovation.ca](mailto:NLobo@oc-innovation.ca)