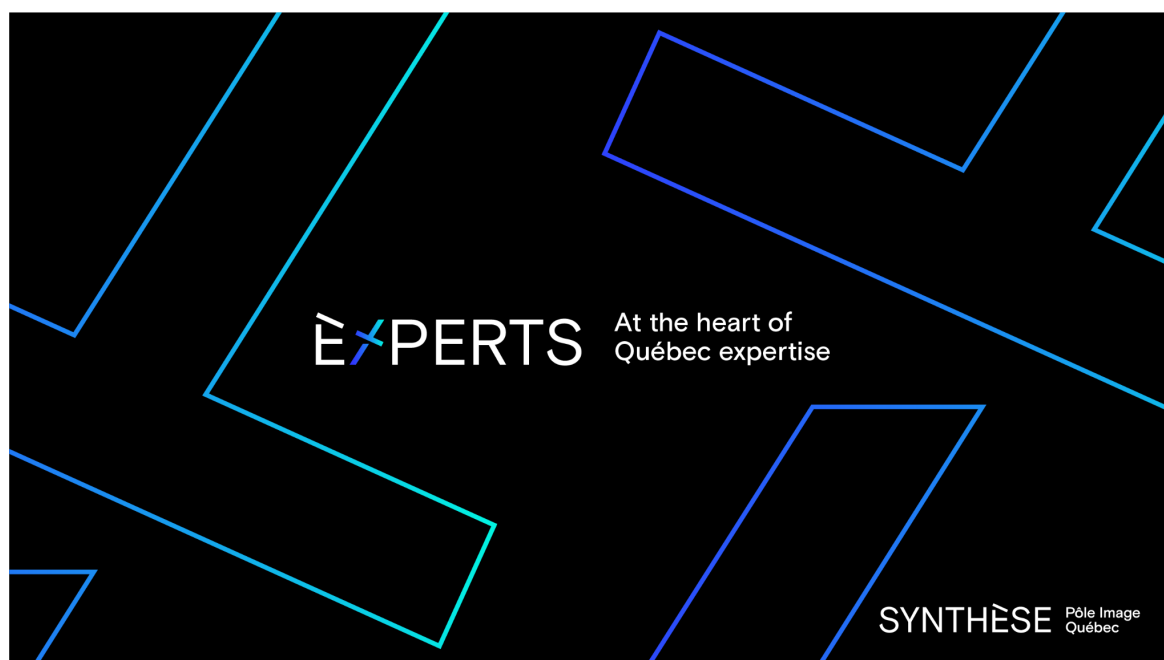


# CALL FOR PROJECTS\_5

## DEVELOPMENT OF ASYNCHRONOUS TRAINING COURSES FOR THE PLATFORM

Worker training for member companies of the Quebec Film and Television Council (QFTC), La Guilde du jeu vidéo du Québec, and Xn Québec

The use of the masculine gender in this document is intended solely to lighten the text and make it easier to read.



## 1. About SYNTHÈSE

Founded in August 2018 by Québec's ministry of education (MEES—*Ministère de l'Éducation et de l'Enseignement supérieur*), the goal of SYNTHÈSE is to provide Québec with a national and international showcase to support the growth and development of leading-edge expertise in the digital creativity sector.

To address future challenges in the sectors of visual effects and animation, video games, immersive environments, large-scale digital installations, and virtual reality, MEES created [SYNTHÈSE](#), a hub in which the driving forces in teaching, research, and the arts work with digital creation companies toward a common goal:

- Advancement of knowledge
- Quality of training
- All forms of artistic, scientific, and technological innovation
- The vitality of the Québec industry

## 2. General description of the call for projects

In September 2020, SYNTHÈSE launched [EXPERTS](#), an online learning platform for professionals working in visual effects, animation, video games, immersive environments, large-scale digital installations, and virtual reality. The platform already hosts about 40 courses, offered in partnership with Québec's public higher education institutions, and has had hundreds of registrations.

Following the success of the initial courses launched on [EXPERTS](#), SYNTHÈSE is opening a fifth call for projects to provide funding for public higher education institutions to develop online asynchronous course content aimed at professionals in our sector. Submitted projects must target the **topics identified** in the attached training module table. In this call for projects, training sessions must be aimed at **intermediate/senior level professionals** (5–10 years' experience). Junior level courses may also be accepted as long as they are aimed at learners who wish to acquire complementary skills to their discipline and develop their careers. Please note that **bilingual projects (French and English)** will be required.

**Companies interested in developing course content are invited to team up with an eligible educational institution.** Instructors may be industry professionals, professors, or lecturers.

Courses funded under this call for projects will be hosted on [EXPERTS](#). The goal is to pool and federate worker training and direct workers to a single virtual space that creates a genuine community of mutual support and learning for our industry. Participating educational institutions will have the visibility they need to promote their expertise on the platform.

The development of training courses is part of a desire to focus on skills development, including the digital creative and technical skills and human resource management skills of industry professionals, in order to **maintain employment links**.

**Courses will be offered to employees of member companies of the Quebec Film and Television Council (QFTC), La Guilde du jeu vidéo du Québec, and Xn Québec, i.e., the following:**

1. Industry professionals seeking to update their skills to keep up with advances in the areas of **visual effects, 2D and 3D animation, video games, virtual reality, computer graphics, and immersive environments**.
2. Workers who wish to develop their skills to gain more thorough and in-depth expertise.

SYNTHÈSE also opens the platform to self-employed workers in the digital creation sector.

**Important:** The educational institution must agree to grant SYNTHÈSE an exclusive distribution licence of no less than **two years** for any content funded under this program.

### 3. Eligibility criteria

- The submission of a completed form with all questions answered. **Please note that the form may be completed in English.**
- The submitted course covers a topic listed in the attached table, is aimed at intermediate/senior level professionals (advanced level course), and is offered in French or both French and English versions. Where applicable, the pedagogical goals, duration of each course module, and software taught must be clearly identified.
- The submitted course is conducted asynchronously.<sup>1</sup>
- The project is submitted by a public higher education institution recognized by the MEES. Institutions may work together to submit a joint project. Partnerships with experts working in private businesses are encouraged.
- Projects that do not fulfill the above criteria will not be assessed.

<sup>1</sup> *In asynchronous training, knowledge is not conveyed in real time. Courses are generally available online in the form of videos and/or documentation is available online or in a forum.*

### 4. Assessment criteria

- Educational institutions must demonstrate relevant expertise and experience related to the course content being developed. They must also introduce the course instructor(s). Instructors may be industry professionals.
- Course content should focus on tools, software, or methods and practices that are currently in use and relevant to businesses in the field.
- Asynchronous courses can take the form of videos, tutorials, or other asynchronous methods deemed relevant. Modules may be of varying length (preferably 10 to 20 minutes per video), with multiple modules forming a course totalling **1 to 15 hours of instruction**. The course may also include written documentation and references.
- Courses must be presented in French or in both French and English versions. Bilingual versions may take the form of a separate English-language audio track, or the French version may be subtitled in English.
- If a bilingual version is created, the educational institution must adjust the budget to take this into account. The educational institution must adjust its budget accordingly.

### 5. Synchronous component, OPTIONAL

This requirement is optional for this call for projects. However, we are allowing for the possibility of submitting a synchronous component of the course. There are two options for complementing an asynchronous course (see below). Synchronous sessions may only be attended by students registered for

the course. All synchronous components, along with their organization (tools such as Zoom, scheduling, etc.) **are the responsibility of the instructor**. SYNTHÈSE will not organize synchronous sessions.

If the educational institution foresees the possibility of a synchronous component, this should be stated in the SYNCHRONOUS OPTION section of the application form. The two acceptable possibilities for this call for projects are:

- Online Q&A sessions for registered students (e.g., on Zoom, Microsoft Teams, Google Hangouts, etc.)
  - Number of sessions planned
  - Session schedule and duration of each session (extended out to 24 months)
- Webinar sessions for all registered students
  - Pre-registration
  - Time allowed for a presentation from the instructor
  - Session schedule and duration of each session (extended out to 24 months)

## 6. Funding criteria

Funding applications for each course (divided into multiple modules) must include the following eligible expenses:

- Fees for initial course development
- Fees for content recording(s)
- Fees for translation and subtitling (if applicable)
- Cost of tool or licence purchase (if applicable)
- Cost of annual updates (used as an assessment only for future calls for projects)
- Costs related to synchronous components (optional)
- Administrative fees and profits must not exceed 15% of the budget, excluding hardware or software purchases.

## 7. Assessment criteria

The assessment committee will examine submitted projects based on the following criteria:

- The project's conformity with program objectives, training topics, and the expected intermediate/advanced course level.
- The quality of the course content, the pedagogical relevance of the activity, and the scope of its impact.
- The expertise and experience of the instructors and of the educational institution with respect to the course content.
- Course content exclusivity for EXPERTS;
- Adherence to deadlines.

## 8. Guiding principles

- SYNTHÈSE, in partnership with the Quebec Film and Television Council (QFTC), La Guilde du jeu vidéo du Québec, and Xn Québec (representing over 300 businesses) is coordinating the development of continuing education content for workers in the field.

- SYNTHÈSE coordinates and hosts online courses on [EXPERTS](#), an online learning platform dedicated to this initiative.
- The [EXPERTS](#) platform operates according to the following principle: “Courses developed by ABC Institutions, advanced by SYNTHÈSE.”
- Courses remain the property of the educational institution, which grants an exclusive distribution licence to SYNTHÈSE for **at least two years**.
- At the end of these two years, the trainer, through the educational institution, will be able to use the content of its training as he or she sees fit and may ask SYNTHÈSE to remove the content from the platform.
- If SYNTHÈSE wants to extend the license beyond the 2-year agreement, the license will be renegotiated with the teacher through the educational institution.
- Quality control for course content is the responsibility of participating educational institutions. Course assessment options are visible on the site, and course evaluation forms are available to all users.
- The trustee of the funding is the educational institution.

## 9. Application procedure

- Call for projects from **May 16 to July 11, 2022**. To submit a project, complete the application form and budget and send it to [experts@polesynthese.com](mailto:experts@polesynthese.com) no later than **July 11, 2022** at midnight.
- Send all questions about this call for projects to [experts@polesynthese.com](mailto:experts@polesynthese.com). Answers to questions will be conveyed to all submitting parties when relevant.
- Project assessment: an assessment committee made up of representatives from the SYNTHÈSE careers committee will select a number of projects, depending on the amount of funding available. Decisions will be communicated no later than **August 5, 2022** at midnight.
- Selected projects must be created and submitted for distribution on the [EXPERTS](#) platform for **October 21, 2022**.
- A user’s guide (in French) for the web platform will be distributed. It will include technical standards to be met, including formats for videos and any supporting documents.
- Funds will be paid in two installments: 50% upon acceptance of the project, and 50% upon project delivery, upon presentation of invoices and a financial statement for the project. For synchronous components, where applicable, applicants must present an invoice following the completed sessions.

## 10. Project overview

At the conclusion of the project, funding grantees must submit the following documents:

1. A financial statement for the funds used: forecast amounts and actual amounts.
2. A post-mortem on development and implementation of the course(s)—a single document for all courses offered by the educational institution.

**Appendix 1: List of asynchronous course topics**

*Courses may be split into multiple training modules. A course generally comprises 1 to 15 hours of instruction.*

Several topics from the list below may be grouped into a single course

ADVANCED TECHNICAL TRAINING FOR 2D AND 3D ARTISTS (VFX, VG, and VR)
CONCEPT ART - MATTE PAINTING
REAL-TIME SHOOTING (VIRTUAL PRODUCTION)
PREVISUALIZATION ON REAL-TIME ENGINES
PRE RENDERED COMPOSITING
ENVIRONMENT DESIGN
CHARACTER AND CREATURE MODELLING
LIGHTING AND SHADING
ANIMATION AND RIGGING
MOTION CAPTURE (FROM PREPARATION TO INTEGRATION)
FACIAL ANIMATION
2D AND 3D TRACKING - MATCHMOVE
ROTOSCOPING AND KEYING
STORYBOARDING
REAL-TIME RENDERING AND PRE-RENDERING TECHNIQUES (REDSHIFT, UNITY, UNREAL)
PHOTOGRAMMETRY

VISUAL EFFECTS (FX-CFX) (Particularly in-demand procedural software)
PARTICLES / SIMULATIONS
HAIR / FUR
WATER / FIRE/ RAIN / SNOW
CLOTH
CLOUDS, SMOKE, FOG
CROWDS
MUSCLES

PRODUCTION MANAGEMENT FOR VISUAL EFFECTS, ANIMATION, VIDEO GAMES, AND IMMERSIVE EXPERIENCES
PRODUCTION TEAM MANAGEMENT
REMOTE OR MULTI-SITE TEAM MANAGEMENT
TALENT MANAGEMENT
VFX TEAM TASK-MANAGEMENT TOOLS
TECHNICAL IMPLEMENTATION MANAGEMENT (3D PIPELINE)
BUDGET, NEGOTIATION, AND LEGAL MATTERS
FUNDING SOURCES

FUNDING APPLICATIONS FOR DIGITAL PRODUCTION
3D ASSET MANAGEMENT TOOLS
CO-DEVELOPMENT MANAGEMENT
MULTIDISCIPLINARY PARTNERSHIPS – COMMUNICATION
ENTREPRENEURSHIP
COMMERCIALIZATION AND MONETIZATION ( <i>LIVEOPS/CLOUD GAMING</i> )
TIME AND PRIORITY MANAGEMENT IN REMOTE WORK
AGILE PROJECT MANAGEMENT METHODS
EQUITY – DIVERSITY – INCLUSION
PROJECT RISK MANAGEMENT
LEADERSHIP DEVELOPMENT
MANAGEMENT OF MATERIAL RESOURCES
TRAIN THE TRAINERS

<b>PROGRAMMING AND DESIGN</b>
REAL-TIME ENGINES
UX DESIGN
VR TOOLS
DESIGNING AND PROGRAMMING FOR CLOUD GAMING
MACHINE LEARNING
PROGRAMMING AI TOOLS
PRINCIPLES OF GAME DESIGN
PRINCIPLES OF DIGITAL EXPERIENCES
PYTHON 3
USD PIPELINE

<b>VR AND EXPERIENCE PRODUCTION</b>
MUSEUM AND BIG DATA PRODUCTIONS
360 PRODUCTION AND DIRECTING
EXPERIENCE PRODUCTION: INTERACTIVITY AND EVENT DESIGN
AR AND MIXED REALITY PRODUCTION

<b>OTHER TOPICS – ALL SECTORS</b>
HOW TO DEVELOP AN ONLINE COURSE – ASYNCHRONOUS LEARNING
ANY OTHER TOPIC YOU DEEM RELEVANT MAY BE CONSIDERED

## Appendix 2: Courses currently on the platform

To date, the following courses are available on EXPERTS:

### 2D-3D creation:

- Pipeline 101: Animated Films and VFX
- Gorilla Walk Cycle
- Introduction to EmberGen
- Introduction to Houdini: First Steps
- Introduction to Houdini: Simulation & HQueue
- RedShift 3.0 on Houdini
- Terrain Creation in Gaea
- 2D & 3D tracking – Matchmove
- Introduction to Substance Painter
- Introduction to Substance Designer
- Advanced Image Extraction with Nuke
- Blender, Rigging, and Animation
- Unreal Engine 4 – Basics
- Immersive Technologies
- Producing in 360
- Producing for Augmented Reality
- Blender, Modelling
- Object Tracking and Rotoanimation
- Lighting and Shading with Arnold in MAYA
- Introduction to the Possibilities of VUE for Environment Creation
- For An Effective use of VR technology



- Introduction to 3D facial animation – Basic Techniques
- Worldspace
- Introduction to ZBrush
- Collision Detection in Simulations
- Introduction to Maya (available soon)
- Graphic programming and physical simulation
- For an in-depth understanding of Augmented Reality
- Thinking about movement: from chronophotography to virtual production

### **Management:**

- Priority Management for Remote Work
- Building Leadership
- Managing a Remote Team
- Change management
- Risk Management
- Preparation for Professional Scrum Master (PSM-I) certification
- Video Game Project Management (available soon)
- Entrepreneurship and Independent Game Studios
- Commercialization and Monetization (discoverability)
- Agility and video games
- Production Management
- Production Team Management in 3D Animation & Visual Effects
- Il était une fois... de trop (course on the prevention of sexual harassment in cultural settings, in partnership with L'inis)

### **Design**

- Video Game User Experience
- Introduction to Serious Game Design
- Unreal Engine 4, Blueprint – Advanced
- Using Sound Interactions in Serious Games
- Motivate and appreciate the production team in digital creation, even remotely (available soon)
- Plan and organize the work of the production team in digital creation, even remotely
- The role of the producer in the immersive industries (available soon)

### Programming

- Deep Neural Networks for Video Games
- Scikit-Learn: machine learning and data analysis

