

Importance of **STEM Soft Skills Development**

for Careers in VFX/CG

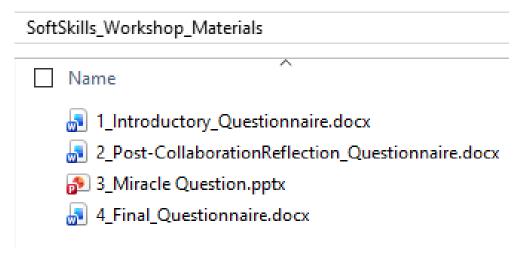
Today's Schedule

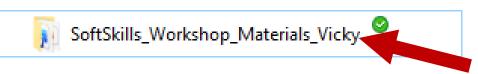
Time	6 Activities
10:00-10:20 (20 min)	 Reading the Participant Information Sheet / Downloading materials Filling out The Introductory Questionnaire
10:20-10:50 (30 min)	 Group Activity: Debugging Challenge in Unreal Engine (Troubleshoot the scene and render out one image)
10:50-11:05 (15 min)	Reflect on previous Group Activity and respond Questionnaire
11:05-11:25 (20 min)	Individual Activity: The Miracle Question
11:25-11:55 (30 min)	Lecture: Soft Skills required in the VFX and CG Industries
11:55-12:10 (15 min)	Filling out Final QuestionnaireSubmitting all materials

Download Workshop Documents from Elements

- Please, go to Elements > MA Visual Effects > Emily S.
- Download 2 zipped files:
 - 1.SoftSkills_Workshop_Materials.zip
 - 2.UE_DebuggingChallenge.zip
- After unzipping the folder, you will find 4 documents.
- Please rename the folder using a nickname at the end, i.e.
 - "SoftSkills_Workshop_Materials_Vicky"
 At the end of this workshop, you will copy this folder back to the Elements folder.

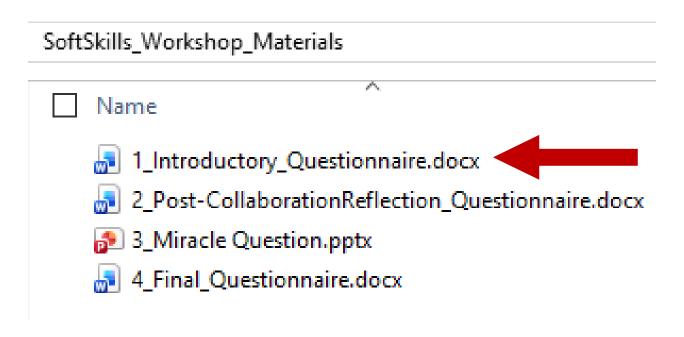






1- Introductory Questionnaire

Please open the first Word document
 "1_Introductory_Questionnaire" and answer the questions.









Brief:



Work in a group of 3 people.



There are 11 errors you need to solve first.



Image needs to be rendered at High Resolution and not as print screen.



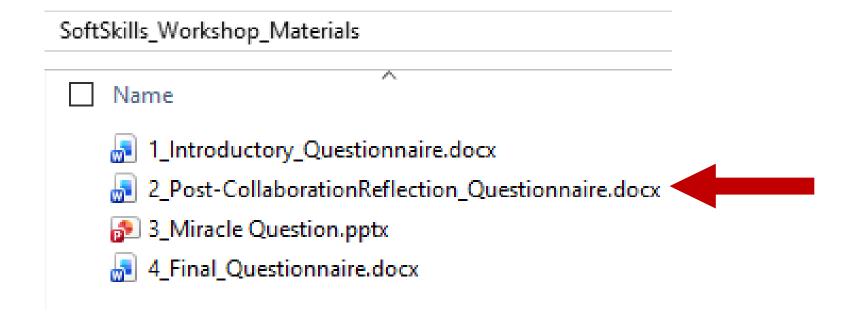
No Al can be used.



Time: you have 30 min to troubleshoot and render.

2B- Post-Collaboration Reflection Questionnaire

Please open the Word Document:
 "2-Post-CollaborationReflection_Questionnaire"
 and answer the questions.



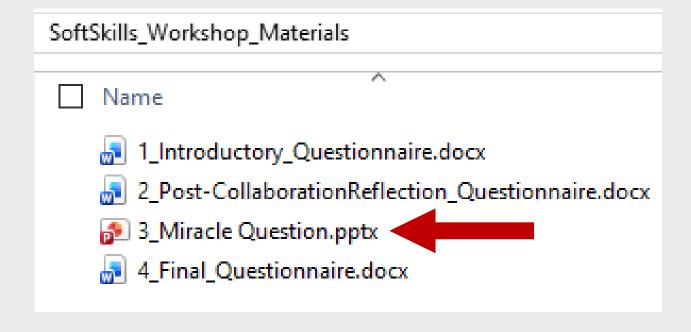
2B- Post-Collaboration Reflection Questionnaire

Which soft skills you used that contributed for the group task?



3- Miracle Question

Please open "3_Miracle Question" PPT document.



3- Miracle Question

- Think of **ONE serious challenge** you've faced in one of your recent projects (e.g., technical, creative, project or time management).
- Now imagine you wake up tomorrow and that challenge has been completely resolved.



Go to the <u>Padlet Link</u> and answer the following questions:

- a) What does success look like?
- b) What steps do you think led to that resolution?
- c) Which soft skills were involved in solving the problem?
- d) How might you develop or strengthen those skills further?



Importance of Soft Skills in Visual Effects and Related Industries



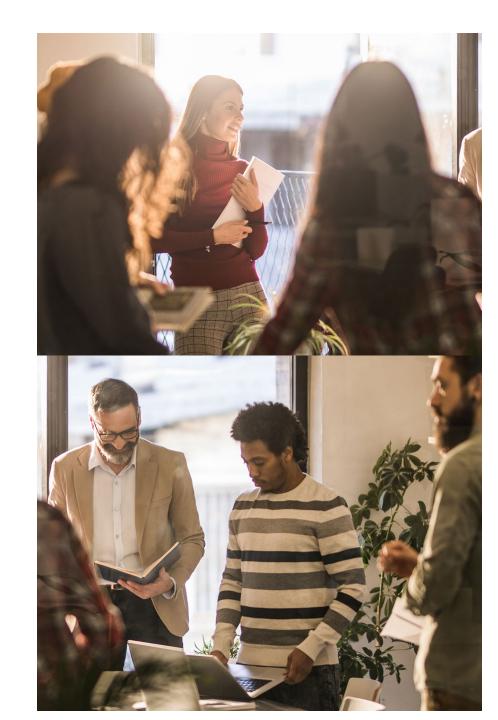


Your Showreel Opens the Door.

But your Soft Skills Decide if You Stay.

What are Soft Skills?

- Personal attributes and interpersonal abilities that influence how effectively someone interacts with others and handles work situations.
- They are non-technical, interpersonal, and cognitive abilities that shape how you work, collaborate, and solve problems.
- Unlike hard skills (like using Maya or Nuke), soft skills are more about how you work than what you do.



Why are they Important?

1. Collaboration is constant

VFX is a team sport. You'll work with animators, compositors, producers, and clients. Being able to **communicate clearly**, **take feedback**, and **work well in a team** is essential.

2. Deadlines are tight

Studios run on schedules. Strong **organizational** and **time management** skills help you deliver high-quality work under pressure.

3. Creative problem-solving is daily

Whether you're fixing a broken render or finding a workaround for a complex shot, **problem-solving** and **resilience** are key.

Why are they Important?

4. Client and supervisor interactions

You'll often need to **present your work**, **negotiate changes**, or **explain technical decisions** to non-technical stakeholders. That's where **interpersonal** and **presentation** skills shine.

5. Career progression

As you move into lead or supervisory roles, **leadership**, **mentoring**, and **conflict resolution** become just as important as your reel.

How Soft Skills are evaluated at La

Assessment Criteria at UAL:

- Enquiry: active learning and reflection. It's how you explore, research and learn about your subject. Enquiry is central to all creative learning at UAL.
- Knowledge: how you inform your work, explore diverse techniques, theories, workflows and connections and appreciate what you do in a wider context.
- Process: your journey of learning. It's how you take risks and experiment. And how you keep the creative momentum going – developing ideas from start to finish.
- Communication: telling the story of your learning and making. It's how you share your learning with an audience, presenting and explaining your work to different people.
- Realisation: the work you create and how this reveals what you've learned. It's taking a look back and evaluating the work you've produced.

How Soft Skills are evaluated at La



Assessment Criteria at UAL	Examples on How you demonstrate your Soft Skills
Enquiry:	Technical Engagement, Creativity and Vision, Ability to Interpret Brief, Self-motivation
Knowledge:	Technical Engagement, Initiative and Proactivity, Self- motivation
Process:	Adaptability, Feedback Receptiveness, Team-working, Time Management, Resilience, Ability to work independently, Self- motivation, Attention to detail
Communication:	Strong Communication, Team-working, Self-motivation
Realisation:	Attention to Detail, Technical engagement

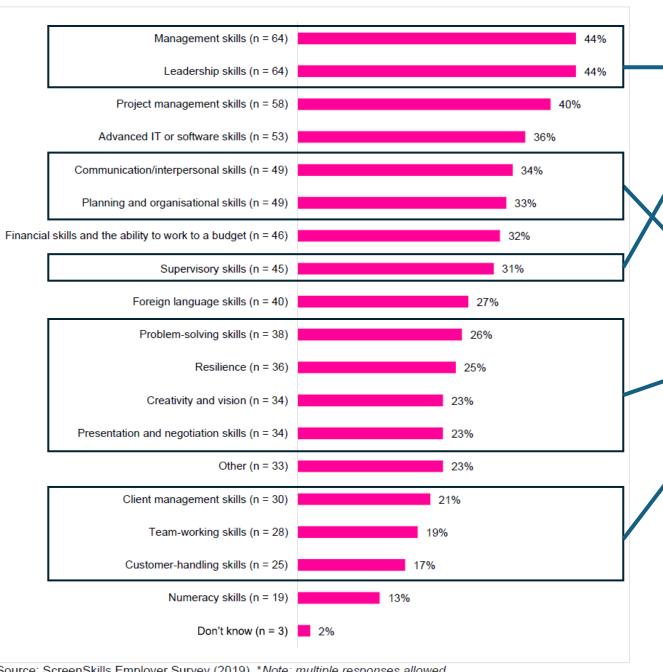


What the Industry said in 2018/2019

- "There are considerable skill gaps in VFX and Animation sectors and they are highly associated to soft skills."
- "Part of the problem is perceived as being the lack of work preparedness of new labour market entrants (Work Foundation, 2017). These gaps do not relate to job specific or technical skills, but in areas such as:
 - soft skills, variously referred to as "personality", "having the right attitude", but also to "have initiative" and "be a self-starter";
 - technical engagement was seen as very important, particularly in front-line technical production and post-production roles;
 - broader knowledge of the film and screen industries and the production process; and
 - the ability to work collaboratively and excellent communication skills [soft skills]."

Source: 2019 Annual ScreenSkills Assessment and the Work Foundation, page 43.

Figure 46: Nature of skills gaps (n = 146)



Mid-Senior Levels: people-oriented abilities like delegation, motivating the team, conflict resolution, performance feedback, managing people, team dynamics and situations.

All Levels

Skills within rectangle are soft skills

Source: ScreenSkills Employer Survey (2019). *Note: multiple responses allowed.

What the Industry say in 2023

- "Across the digital content production sectors, this Study found substantial gaps in people skills. Employers from the animation, VFX, post-production, [games] and emerging tech sectors are finding that people skills, such as adaptability and teamwork, are particularly lacking in recent graduates at the entry level who have less industry experience of working across multiple workflows."
- "Gaps in people skills are particularly relevant given the constantly and rapidly changing nature of the digital content production sectors, largely driven by technological advances like AI and machine learning, among others (see section 4.1). Therefore, there is a need for skilled talent that can adapt to the rapidly changing sectors, work collaboratively, and are self-starters. Such talent is then able to develop the cross-disciplinary skills required to navigate a dynamic and rapidly changing set of industries."

Skills Scoping Study for the UK's Digital Content Production Sectors, Report to the British Film Institute by Olsberg Spi, December 2023, page 40.



VFX is Art and STEM

STEM (science, technology, engineering and math)



VFX is Art and STEM

"Students aren't graduating with the right skills for a career in the UK's burgeoning VFX industry: There's a real need for students to be made aware that STEM subjects and Art are both important for VFX, and we need to ensure that the quality of graduates meets our need to continue producing high quality and technically challenging work."

Interview with Mill co-founder and chief creative officer Pat Joseph, February 2014 Televisual Article

"Both artists and TDs (Technical Directors) require a blend of art and science, technology, engineering and maths (STEM) skills. But more art is needed for artist roles and more STEM is needed for the TD roles."

VFX Industry Career Map, Screen Skills

VFX is Art and STEM

"The main creative jobs in VFX, animation and post-production require a special mix of arts and STEM skills, with high computer literacy and some coding ability."

Access VFX

"Many roles in VFX and animation require a blend of creative and STEM skills and talent is in global shortage. In July 2019, the then Home Secretary, Sajid Javid accepted the Migration Advisory Committee's (MAC) recommendations to place virtually all artist and production roles in our sectors onto the Shortage Occupation List."

UK Screen Alliance, Animation UK and Access VFX

STEM Soft Skills

Many of the soft skills required in the VFX/CG industries are STEM-relevant, especially in a field like VFX that blends technical precision with creative execution.



The following Soft Skills in Red are STEM oriented

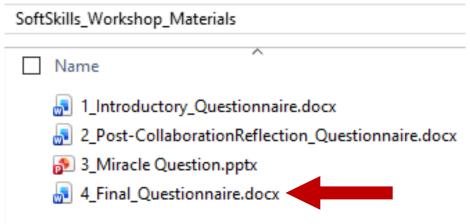
- Problem-Solving The ability to troubleshoot technical issues, optimize workflows, creatively resolve visual or pipeline challenges and adapting to technical constraints.
- Technical Engagement A proactive attitude toward learning and using new tools, software, and scripting languages. VFX artists must stay current with evolving technology and workflows.
- Attention to Detail Precision and quality control are critical in VFX from pixelperfect roto to seamless compositing. Small errors can break realism or continuity.
- Feedback receptiveness Iteration is part of the process artists must take critique constructively and apply it efficiently.
- Adaptability The ability to adjust quickly to new tools, feedback, or production changes. VFX pipelines are dynamic, and flexibility is key.
- Strong Communication Explaining technical or creative decisions clearly to teammates, supervisors, or clients — especially important in cross-disciplinary teams.

- Team-Working VFX is highly collaborative. Artists must work across departments (e.g., FX, lighting, comp) and communicate effectively to maintain pipeline flow.
- Initiative Taking responsibility for learning, taking ownership of tasks, going beyond what is required or expected to add extra value, and improving without waiting for instruction vital in fast-paced production environments.
- Proactivity Anticipating problems or needs and acting early to prevent issues.
- Creativity and Vision While often seen as a "creative" trait, it's essential in VFX for designing effects, solving visual challenges, and contributing to storytelling.
- **Time Management** Balancing multiple shots or tasks, often with overlapping deadlines, while maintaining quality and meeting delivery schedules.
- **Resilience** Handling long hours, tight deadlines, and frequent revisions without losing motivation or focus.

- Ability to Work Independently The capacity to manage tasks autonomously, make decisions, and solve problems without constant supervision—essential for VFX artists who often handle complex components of a pipeline.
- **Self-Motivation** the internal drive to start and complete tasks without external pressure and the ability to troubleshoot independently. It's about personal determination.
- Ability to Interpret Brief It requires active listening, critical thinking, and clear communication to translate client requirements into creative and technical solutions.
 This ability ensures alignment with project goals and fosters collaboration across teams, making it essential for professional success.

5- Final Questionnaire

Please open the last Word document (4_Final Questionnaire) and answer the questions.



- After finishing, please give a nickname to your folder (like the image below) and save it back to:
 - Elements > MA Visual Effects > Emily > ! SoftSkills_Workshop

