SEMS Industrial Advisory Board Meeting

Date: 8/11/2023

Link to recording:

<u>https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTFlZjcxYWYtYzM0NS00Y2VjLWE0YzEtODQzZDkwM2FjZjA3%40thread.v2/0?context=%7b%22Tid%22%3a%22569df091-b013-40e3-86ee-bd9cb9e25814%22%2c%22Oid%22%3a%220c5d4048-a6dc-436b-8b54-fb23355dcd11%22%7d</u>

In-person attendees:

Alok Gupta	ITP Aero
Martin Muir	Airbus
Richard Smith	Winchester Consulting
Sharon Knight	MHRA
Phil Kennedy	Ex 3M
Keith Rodgers	Nanoforce Ltd
Paul Balcombe	SEMS
Jae-Hwan Park	SEMS
Henri Huijberts	SEMS

[note that a full in person register wasn't taken on the day, so full attendee list may be larger]

Online Attendees:

Danielle De Villiers	MatOrtho
Yasmin Farhatnia	Platinum Medica
Ranjan Vepa	SEMS
Caroly Small	Arconic
Peter Harrison	AWE
Zulshan Mahmood	Ford
Sanaa Hafeez	SEMS
Monisha Philips	TÜV SÜD
Maria Romero-Gonzalez	SEMS
Giovanni Santagiuliana	Polymateria
Tina Chowdury	SEMS

1. Review of the notes/actions from last meeting

Minutes accepted

2. Engineering Management Apprenticeship

J-H presented the two programmes.

Q: What is the qualification being offered? J-H: It will be a PGDip

Q: What is the demand for this programme & are there good employment prospects?

HH: They may already be employed by the company J-H: Initial conversations have indicated some demand, but we're at early stages

Edo: Are any new modules being created? J-H: Yes 4 new modules are being created

RS Are there any AI and data driven aspects? J-H: It would be covered in a Systems Engineering MSc or degree apprenticeship (DA), but is avoided in the Engineering Management proposed programmes

Q. People management and HR isn't explicitly included in Eng Management, but this would be useful for people entering management roles.

MM: and why is it in the DA, but not the MSc

OF: The project management is included, which could include a bit of people management as needed but it isn't explicit. People management is part of the IFATE standard so would be included for the DA version

OF: would the Engineering Business Management PGDip be attractive to industry? MM: most of our apprentices at level 7 are getting degree level (MSc) qualifications.

Q. How do we ensure that there is good contact with the team where the apprentice is working? **HH:** Tripartite meetings (3-4 per year).

AG: What would the delivery mode be? **J-H:** not yet decided (it could be day release or block release)

AG: What time commitment is needed? J-H: 150 hours/week.

Q Would work experience be required to do the DA? **J-H:** No

MM: Can't see Airbus being involved in the DA as it overlaps with internal training opportunities. **PK:** Agree that this may not be attractive to large companies who already have training programmes, but may be attractive to SMEs.

EB: What is your USP

OF: proximity to customers in London is important.

3. Review of latest NSS/TEF metrics (Maria Romero-Gonzalez)

MRR: Outlined what the NSS is. Highlighted that we're struggling with assessment and feedback, and our approach to improvement in this area. Outlined importance or authentic assessment in helping the student connect their learning with its relevance for engineering.

Q. found authentic assessment was very useful on Materials Science course at QMUL. How does SEMS coach students to deal with failure.

MRR: We're looking at "not eligible to progress" numbers, but have not managed to address this yet. Are looking at tracking engagement of students and identify low engagement early on. Advisor sessions are re-starting this year.

MM: Should we be getting 360 degree feedback on individual items of assessment?

4. Programme level assessment (Maria Romero-Gonzalez)

MRR: Highlighted that assessing modules together can help connect concepts across modules and help students understand the relevance of their learning.

Q. If you could highlight competencies that need to be addressed by an assessment, then it would be useful for industry to build a case study for use in the assessment.

SK: Would it be helpful for engineers to provide examples of when they've used the content of their degree course.

JS. Need to ensure that technical competence is preserved.

MRR: To do this we've started re-introducing in person exams to improve rigour of technical assessment.

MM: You do need knowledge in order to make decisions in time-pressured situations, so in person examination is appreciated.

5. Implementation of new final year undergraduate project module (Henri Huijberts / Julia Shelton)

HH: highlighted the need to change the way we deliver projects in order to cope with cohort of >400 students. It's tough to do this with 400 individual projects.

MM: What is needed in terms of industry input for projects?

HH: need to identify projects with at least 5 work packages within a project so that each student in a group has an individual area of focus.

MM: How do we prevent collusion between groups?

JS: Collaboration between groups is encouraged. There is plenty of individual assessment which should hopefully avoid collusion at group or individual scale.

6. IAB discussion with SEMS student representatives (lead by industry Chair)

SSLC comment: Personally welcomes the return of in person exams.

Q. How is neurodiversity being accommodated with the return of in person exams? SSLC1: Some module organisers have asked if students need special accommodations.

SSLC2 (2nd yr rep): Students were scared of the return of in person exams. It was explained that online exams do not represent real life situations. Also commented that in person exams should give people confidence when going to assessment centres.

Q. Did you sit A-Levels in person? **SSLC:** Yes

SSLC3: The QM Centre for Undergraduate Research is a really excellent opportunity for students wanting to pursue a career in research. Allows him to extend knowledge and experience beyond what he's learning in his modules. Managing exams/assessment is challenging. **MRR:** Highlighted that the QMCUR is a new initiative which has been funded by QMUL.

SSLC3: You need to apply with a cover letter and then attend an interview. This is good preparation for future interviews.

MM: Is there anything that has been challenging/missing/useful during in your degrees? **SSLC:** More practical work would be useful. Learning software tools is useful.

SSLC: There's been a shift from lectured content, to giving the students the content and then asking them to engage in a discussion where you apply the content.

7. **Date of Next Meeting** 6/3/2024

8. **AOB**

MM: Please circulate the minutes of the meeting before the next one.

OF: Could we have a topic suggested by the SSLC at the next meeting?