# **University of Glasgow**

# Academic Standards Committee – Wednesday 20 April 2011

# Report from the Programme Approval Group for the College of Science & Engineering

Mrs R Cole, Senate Office

#### Present:

Professor N Evans (Convener), Mrs L Hancock, Dr D MacLeod

#### In attendance:

Mrs R Cole

## 1. POSTGRADUATE PROPOSALS

## 1.1 MRes Advanced Statistics (New Programme)

**Rationale:** This is one of a number of new postgraduate taught programmes being introduced, which is anticipated to attract students from the UK as well as from the developing world. This programme is intended to prepare students for entry to graduate-level Statistics employment or to a Statistics doctoral programme.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: paras 2 and 3 should be moved to section 15.
- Section 10: Knowledge and understanding, 1<sup>st</sup> bullet: 'fundamental concepts' not appropriate for Masters level.
- Section 14: First two sentences should be deleted, as duration of study is covered by regulations, and structure of programme is evident from lists of courses.
- Section 14: Courses listed are all at Level M so do not need to include '(Level M)' for each one; indicate that number in brackets represents number of credits.
- Section 14: 'Summer (May August): delete 'Further optional courses might be made available in future years'.
- Section 14: update reference in web link to 2011-12.
- Section 14: Remove reference to other four Statistics PGT programmes as they are not relevant to this specification.
- Section 15: Remove reference to University Health Service.
- PSD A3: Is the College satisfied that adequate supervision of projects can be provided with existing staffing level?
- PSD A4/5: Spot checking showed that responses to concerns raised through consultations had been thorough. However, Learning and Teaching Committee minutes do not record any detail of the consideration of these. There appears to have been no input from students or RIO.

#### **Conclusion:**

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 1.2 MSc Biostatistics (New Programme)

**Rationale:** This is one of a number of new postgraduate taught programmes being introduced, which is anticipated to attract students from the UK as well as from the developing world. Biostatistics is an area of recognised research excellence in which there is also a high demand for statisticians.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: paras 2 and 3 should be moved to section 15.
- Section 9: first bullet: 'sound grounding' not appropriate for Masters level or if this refers to the 'career change' dimension, this should be clearer. (Same point section 10 bullet 1.)
- Section 10: Knowledge and understanding, and Subject-specific skills should include reference to Biostatistics.
- Section 14: First two sentences should be deleted, as duration of study is covered by regulations, and structure of programme is evident from lists of courses.
- Section 14: Courses listed are all at Level M so do not need to include '(Level M)'
  for each one; indicate that number in brackets represents number of credits.
- Section 14: 'Summer (May August): delete 'Further optional courses might be made available in future years'.
- Section 14: update reference in web link to 2011-12.
- Section 14: Remove reference to other three Statistics PGT programmes as are not relevant to this specification. Delete final paragraph.
- Section 15: Remove reference to University Health Service.
- PSD A3: Is the College satisfied that adequate supervision of projects can be provided with existing staffing level?
- PSD A4/5: Spot checking showed that responses to concerns raised through consultations had been thorough. However, Learning and Teaching Committee minutes do not record any detail of the consideration of these. There appears to have been no input from students or RIO.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 1.3 MSc Environmental Statistics (New Programme)

**Rationale:** This is one of a number of new postgraduate taught programmes being introduced, which is anticipated to attract students from the UK as well as from the developing world. Environmental Statistics is an area of recognised research excellence in which there is also a high demand for statisticians.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

• Section 9: first bullet: 'sound grounding' not appropriate for Masters level – or if this refers to the 'career change' dimension, this should be clearer. (Same point section 10 bullet 1.)

- Section 10: Knowledge and understanding, and Subject-specific skills should include reference to Environmental Statistics.
- Section 14: First two sentences should be deleted, as duration of study is covered by regulations, and structure of programme is evident from lists of courses.
- Section 14: Courses listed are all at Level M so do not need to include '(Level M)' for each one; indicate that number in brackets represents number of credits.
- Section 14: update reference in web link to 2011-12.
- Section 14: Remove reference to other three Statistics PGT programmes as are not relevant to this specification. Delete final paragraph.
- Section 15: Remove reference to University Health Service.
- PSD A3: Is the College satisfied that adequate supervision of projects can be provided with existing staffing level?
- PSD A4/5: Spot checking showed that responses to concerns raised through consultations had been thorough. However, Learning and Teaching Committee minutes do not record any detail of the consideration of these. There appears to have been no input from students or RIO.

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 1.4 MSc Social Statistics (New Programme)

**Rationale:** This is one of a number of new postgraduate taught programmes being introduced, which is anticipated to attract students from the UK as well as from the developing world.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

- Section 9: first bullet: 'sound grounding' not appropriate for Masters level or if this refers to the 'career change' dimension, make this clearer. (Same point section 10 bullet 1.)
- Section 10: Knowledge and understanding, and Subject-specific skills should include reference to Social Statistics.
- Section 14: First two sentences should be deleted, as duration of study is covered by regulations, and structure of programme is evident from lists of courses.
- Section 14: Courses listed are all at Level M so do not need to include '(Level M)' for each one; indicate that number in brackets represents number of credits.
- Section 14: update reference in web link to 2011-12.
- Section 14: Remove reference to other three Statistics PGT programmes as are not relevant to this specification. Delete final paragraph.
- Section 15: Remove reference to University Health Service.
- PSD A3: Is the College satisfied that adequate supervision of projects can be provided with existing staffing level?
- PSD A4/5: Spot checking showed that responses to concerns raised through consultations had been thorough. However, Learning and Teaching Committee minutes do not record any detail of the consideration of these. There appears to have been no input from students or RIO.

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.5 MSc Statistics (New Programme)

**Rationale:** This is one of a number of new postgraduate taught programmes being introduced, which is anticipated to attract students from the UK as well as from the developing world.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: first bullet: 'sound grounding' not appropriate for Masters level or if this refers to the 'career change' dimension, this should be clearer. (Same point section 10 bullet 1.)
- Section 14: First two sentences should be deleted, as duration of study is covered by regulations, and structure of programme is evident from lists of courses.
- Section 14: Courses listed are all at Level M so do not need to include '(Level M)'
  for each one; indicate that number in brackets represents number of credits.
- Section 14: update reference in web link to 2011-12.
- Section 14: Remove reference to other three Statistics PGT programmes as are not relevant to this specification. Delete final paragraph.
- Section 15: Remove reference to University Health Service.
- PSD A3: Is the College satisfied that adequate supervision of projects can be provided with existing staffing level?
- PSD A4/5: Spot checking showed that responses to concerns raised through consultations had been thorough. Learning and Teaching Committee minutes recorded concerns raised by the external academic consultants in relation to the number of assessments available for M level courses and indicated that it required further information on this. Has this been provided? There appears to have been no input from students or RIO.

## **Conclusion:**

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.6 MSc/PgDip Aquatic System Science (New Programme)

**Rationale:** This is one of a series of programmes using shared courses, many of which are pre-exisiting, to capitalise on the University's expertise in water science and management. The programmes (1.6-1.9) operate interchangeably and students will be able to move between programmes during their study (with the topic of the final research dissertation determining the most appropriate degree award in some cases). The interdisciplinary nature of the programmes will attract students from diverse backgrounds—the experience of working in such a group will challenge students and provide them with skills and experiences for their careers.

**Regulations:** The PSD indicates that the programme will be governed by the generic MSc regulations on SciEng.23(PG) of the Calendar, but it is assumed that this should be corrected to the generic PGT regulations currently on SciEng.18(PG) which has the appropriate structure for the programme being offered. The PG Diploma will be governed by the generic regulations for Postgraduate Certificates and Diplomas, although this is not currently stated on the PSD.

**Programme Specification:** The Group considered the programme specification for this award, noting the structure adopted by this range of programmes: that each distinct 'stream' was covered by a separate programme specification with its own award title, and the PSD indicating a degree of flexibility for students to move between different programmes as appropriate during the course of their studies. This approach was commended as a model for related PGT programmes.

The PAG raised several points of detail requiring to be addressed:

## MSc

- Para 2: Delete from 'The School of Geographical ...' as this information is not relevant to the programme aims.
- Section 9: Delete final sentence
- Section 10: After opening statement, insert stem sentence: 'By the end of the programme students will be able to:'
- Section 11: Suggest deletion of final paragraph.
- Section 12: This contains some unnecessary descriptive material e.g. opening paragraph can be deleted. Suggest deletion in para 4 of 'and opportunities will be taken...' as this may become outdated.
- Section 13: leave blank as no benchmark.
- Section 14: Unnecessary descriptive content should be deleted (paras 1-5).
- Section 14: Pre-course: give 'SCENE' in full.
- Section 14: Elective courses: Remove reference to placement to be introduced in future years as programme specification applies to 2011-12.
- Non-credited electives: if students take these in addition to credited electives do
  they have to pay additional fees? (Issue of additional fees had been raised at
  Learning and Teaching Committee but doesn't appear to have been addressed in
  the programme specification.) As they are elective, presumably there is no
  requirement to pass?
- Section 14: Give '(60 credits)' after reference to project.
- Section 14: Final four paragraphs should be replaced with standard reference to regulations:
  - "This programme will be governed by the generic regulations for Taught Masters degrees. These regulations include the requirements in relation to:
  - (a) student progress to the dissertation stage of the programme, and
  - (b) the award of the degree (180 credits), and
  - (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/ "

[Note: the generic regulations do not include any requirements in relation to progress from the first 60 taught credits (PGCertificate) to the second 60 taught credits (PGDiploma) stage.]

Section 15: Delete reference to University Health Service

# **PGDip**

Same points apply as above. In addition:

- Sections 9 and 10 are identical for the MSc and the PGDiploma. Would expect to be some refinement of the former reflecting the research project undertaken.
- Section 14: Examination and Progress: Delete this section and replace with:

"This programme will be governed by the generic regulations for Postgraduate Certificates and Diplomas. These regulations include the requirements in relation to:

- (a) The award of the postgraduate Diploma, and
- (b) The early exit award of postgraduate Certificate.

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/

[Note: the generic regulations do not include any requirements in relation to progress from the Certificate to the Diploma stage.]

- Proposal Support Document: A2. Line 1: replace 'modules' with 'courses'.
- Learning and Teaching Committee minutes do not record the detail of scrutiny of consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.7 MSc/PgDip Coastal System Management (New Programme)

Comments noted at 1.6 above apply.

## 1.8 MSc/PgDip Freshwater System Science (New Programme)

Comments noted at 1.6 above apply.

## 1.9 MSc/PgDip Marine System Science (New Programme)

Comments noted at 1.6 above apply.

## 1.10 MSc Automotive Engineering (New Programme)

**Rationale:** There is no other MSc programme in Automotive Engineering in Scotland and the introduction of this programme is timely in view of the changing basis of the sector from non-renewable fossil based hydrocarbon fuels to greener, more renewable sources, with major implications for technology, manufacturing, fueling infrastructure, society and ecology.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

- Section 9: 4<sup>th</sup> bullet: delete 'regular'; delete final bullet (not an appropriate programme aim for students)
- Section 10: Move stem sentence 'By the end of the programme students...' to above Knowledge and Understanding (so as to cover other headings too).
- Section 15: Remove reference to University Health Service.
- Learning and Teaching Committee minutes do not indicate any detail of the scrutiny of consultations.

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.11 MSc Geomatics and Management (New Programme)

**Rationale:** There are currently four MSc Geomatics programmes at the University but they assume no academic background in the subject. This new programme will appeal to those who already have such a background. It is intended to promote the programme mainly but not exclusively in China and Eastern Europe.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: final paragraph should be moved to section 15 or deleted.
- Section 10: Subject-specific: these are very generic and do not clearly reflect the Management element of the degree.
- Section 11: too much descriptive detail on assessment.
- Section 12: again there is more descriptive detail than is needed.
- Section 13: leave blank as there is no benchmark.
- Section 14: Replace first section with standard statement of regulations:
  - "This programme will be governed by the generic regulations for Taught Masters degrees. These regulations include the requirements in relation to:
  - (a) student progress to the dissertation stage of the programme, and
  - (b) the award of the degree (180 credits), and
  - (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Section 14 table: delete columns headed 'Day/time', 'SCQF level' and 'Existing/new'.
- Section 15: delete reference to University Health Service.

PSD A4: consultations had been undertaken but Learning and Teaching Committee minutes do not indicate what issues had been raised. No student responses had been received, and Committee minutes indicated that these were required before final approval of Board of Studies could be confirmed.

#### **Conclusion:**

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.12 MSc Science for International Development (New Programme)

Rationale: The programme offers training for science graduates wishing to enter the development sector.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The programme specification describes four 'pathways' through the programme, with a compulsory core of 40 credits. The PAG's view is that

these four pathways should be broken down into four distinct programmes, with different award titles, and four programme specifications. It is considered that the facility to reflect a specialisation within an award title would be attractive to students, and that individual programme specifications would be clearer. The PAG refers to the structure adopted by the related programmes at 1.6-1.9 above as the model to be followed by these streams.

In addition the following points are raised:

- Section 10: Knowledge and Understanding: 1<sup>st</sup> paragraph repeats the programme aims and should be deleted.
- Section 13: Should be left blank as no benchmark applies
- Section 14: 'For those completing the MSc' delete (as the programme specification is for the Masters)
  - Section 14: Delete 'Early exit awards.... are available' and insert: "This programme will be governed by the generic regulations for Taught Masters degrees. These regulations include the requirements in relation to:
  - (a) student progress to the dissertation stage of the programme, and
  - (b) the award of the degree (180 credits), and
  - (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- PSD: A2. A fuller rationale is required.
- PSD: A3. Indicates that teaching space will be required, but 4.3 indicates there has been no consultation with CRB.
- Learning and teaching Committee minutes do not give any detail of the scrutiny of consultations.

# **Conclusion:**

The Group recommends the proposal to ASC, subject to programme specifications for each 'stream' being developed and to the other issues identified above being addressed.

## 1.13 MSc Embedded Electronic Systems (New Programme)

**Rationale:** The combination of existing knowledge and expertise from Electronic Engineering and Computing Science is being brought together to offer a new programme in embedded electronic systems. The programme is relevant to the developing needs of global industry for professional engineers and computing scientists with the knowledge and skills to be able to span traditional engineering disciplines.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

- Section 9: delete bullets 3, 4 and 7 as they are not appropriate as programme aims.
- Section 10: Intellectual skills: bullets 3, 4 and 5 should be moved to transferable/key skills; transferable/key skills bullets 1 and 2 require verbs.
- Section 11: Too much detail. Suggest reducing the amount of information and presenting as a list for clarity.
- Section 12: Again do not need so much descriptive information.

Section 14: replace initial paragraph with: "This programme will be governed by the generic regulations for Taught Masters degrees. These regulations include the requirements in relation to:

- (a) student progress to the dissertation stage of the programme, and
- (b) the award of the degree (180 credits), and
- (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/""

- Section 14 table: suggest inserting (20 credits) after heading 'Optional courses'
- Section 14: 'June September' delete 1st sentence.
- Section 15: Delete reference to University Health Service.
- Spot checking of the documentation: the students noted that there needed to be more information on the project with industrial links being highlighted. Has this been addressed? Learning and Teaching Committee minutes do not show what issues were raised through scrutiny of the consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.14 MSc Mechatronics (New Programme)

**Rationale:** The combination of existing knowledge and expertise from Mechanical, Electronic and Aerospace Engineering is being brought together to offer a new programme in Mechatronics. The programme is relevant to the developing needs of global industry for professional engineers with the knowledge and skills to be able to span traditional engineering disciplines.

**Regulations**: The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: Final bullet point is not appropriate as a programme aim. Delete.
- Section 14: 'It is governed by ...' Replace with standard statement: "This
  programme will be governed by the generic regulations for Taught Masters
  degrees. These regulations include the requirements in relation to:
  - (a) student progress to the dissertation stage of the programme, and
  - (b) the award of the degree (180 credits), and
  - (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Section 14: Final sentence can be deleted.
- Section 15: Delete reference to University Health Service.
- Learning and Teaching Committee minutes do not give any detail of the issues raised through scrutiny of the consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 1.15 MSc Space Systems Engineering (New Programme)

**Rationale:** This programme replaces the MSc in Space Mission Analysis and Design which has been withdrawn due to the departure of a key member of staff. This new programme incorporates existing courses from across the College; no new courses are required.

**Regulations**: The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: paragraphs 2 and 3 should be deleted as they are not appropriate programme aims.
- Section 10: Use the stem sentence: '... students will be able to:'
- Section 10: Transferable/key skills: bullets 1 and 2 more appropriate to Subjectspecific.
- Section 14: Replace 1<sup>st</sup> paragraph with:
  - "This programme will be governed by the generic regulations for Taught Masters degrees. These regulations include the requirements in relation to:
  - (a) student progress to the dissertation stage of the programme, and
  - (b) the award of the degree (180 credits), and
  - (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Section 15: Remove reference to University Health Service.
- PSD A2. Line 2 replace 'modules' with 'courses'.
- PSD A4. Has there been any consultation on coherence of new programme and title (with external academic, employers, RIO)?

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.16 MSc Sustainable Energy (New Programme)

**Rationale:** There is a wide range of work on-going at the University in the field of energy, with applicability to the 'big 3' users: heating, transport and electrical power. This new MSc fits within a cohesive framework aimed at establishing the University as a central player in the energy field, and will seek to address the UK's lack of suitably trained scientists and engineers needed to assist the UK in meeting its EU commitments on the de-carbonising of energy supply.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

 Section 14: The first section (describing various combinations of courses) is too detailed for the programme specification and should be removed. In the section on Optional courses, a statement could be inserted: 'taking into account previous educational history'. Section 14: Following 'It is governed by the generic Regulations for Taught Masters Degrees.' Delete reference to early exit awards and replace with:

These regulations include the requirements in relation to:

- (a) student progress to the dissertation stage of the programme, and
- (b) the award of the degree (180 credits), and
- (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/

- Section 14: Environmental Ethics course to be delivered in Crichton: Learning and Teaching Committee minutes note the need for clarification of support on main campus. Has this been addressed?
- Section 15: Remove reference to University Health Service.
- PSD A3: the need for additional resource has been identified, box needs to be checked to confirm agreement.
- PSD 4.7: Indicates that no consultation with RIO has been undertaken.
- Learning and Teaching Committee minutes do not give any detail of the scrutiny of consultations.

#### **Conclusion:**

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 1.17 MSc Sustainable Water Resources (New Programme)

Rationale: It has been recognised for some time that the School of Engineering has the capacity to provide state of the art MSc taught programmes that reflect the developing needs of global industry for professional engineers with the knowledge and skills to be able to span traditional engineering disciplines. The combination of existing knowledge and expertise from Civil Engineering, Business, Geographical and Earth Sciences, Chemistry, Mathematics and Statistics and the Institute of Biodiversity, Health and Comparative Medicine provides a solid interdisciplinary base on which to offer a coherent programme of study in sustainable water resources.

**Regulations:** The programme will be governed by the generic regulations for taught masters degrees currently set out in the University Calendar on SciEng.18(PG).

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

• Section 11: last point to be bulleted.

Section 14: Following 'The programme is governed by the Generic Regulations for Taught Masters Degrees.' Delete reference to early exit awards and replace with:

These regulations include the requirements in relation to:

- (a) student progress to the dissertation stage of the programme, and
- (b) the award of the degree (180 credits), and
- (c) early exit awards of postgraduate diploma (120 credits) and postgraduate certificate (60 credits).

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/

Section 15: Delete reference to University Health Service.

• Learning and Teaching Committee minutes record a query regarding the continuation of the associated programme at Strathclyde. Has this been clarified? Committee minutes do not give any detail of the scrutiny of consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 2. UNDERGRADUATE PROPOSALS

## 2.1 BEng (Hons) Mechanical Design Engineering (SIT) (New Programme)

**Rationale:** The combination of existing knowledge and expertise from Mechanical, Electronic and Aerospace Engineering provides a solid base on which to offer a coherent programme of study in Mechanical Design Engineering and will give students a strong background for careers in manufacturing. Students will be accepted into year three of the programme and teaching will be delivered in Singapore by Glasgow staff.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the BEng currently on SciEng.8(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

#### Points for discussion:

- Section 10: stem sentence for ILOs should read '... the student will be able to...'
- Section 12: This section should be shortened, with just a brief indication of the methods to be used. (Also, remove any reference to year 5 penultimate paragraph as it is a 4 year programme)
- Section 14: no need to include extracts from regulations. Use standard paragraph instead.
- Section 15: should not include reference to facilities at Glasgow as it is to be delivered in Singapore. Customise as appropriate.
- PSD A1.: Insert '(Hons)' into title.
- The PAG has assumed that necessary consultations have been undertaken through the collaborations process.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 2.2 BEng Mechatronics (New Programme)

**Rationale:** The combination of existing knowledge and expertise from Mechanical, Electronic and Aerospace Engineering provides a solid base on which to offer a coherent programme of study in Mechatronics and will give students a strong background for careers in manufacturing.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the BEng currently on SciEng.8(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

• Section 1: Insert (Hons) into title.

- Section 9: final paragraph re possibilities for study abroad should be moved to Section 15.
- Section 11: delete 'although they carry a few marks'.
- Section 12: less detail required in relation to lectures.
- PSD: There is no reference to consultation with RIO, which is mandatory. Learning and Teaching Committee minutes show no evidence of the other consultations having been considered. This is a requirement, as per <u>Note</u> on page 3 of PSD.

The Group recommends the proposal to ASC, subject to the conditions and amendments identified above being met.

# 2.3 BEng Mechatronics (SIT) (New Programme)

**Rationale:** The combination of existing knowledge and expertise from Mechanical, Electronic and Aerospace Engineering provides a solid base on which to offer a coherent programme of study in Mechatronics and will give students a strong background for careers in manufacturing. Students will be accepted into year three of the programme and teaching will be delivered in Singapore by Glasgow staff.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the BEng currently on SciEng.8(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 1: Insert (Hons) into title
- Section 14: standard statement re regulations. Delete reference to percentages, and remove progression requirements and requirements for award.
- Section 14: Query title for Year 4 ODJX
- Section 15: should not include reference to facilities at Glasgow as it is to be delivered in Singapore. Customise as appropriate.
- PSD A1: Insert '(Hons)' into title.
- The PAG has assumed that necessary consultations have been undertaken through the collaborations process.

## **Conclusion:**

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 2.4 BSc Earth Studies (New Programme)

**Rationale:** Clarification of the rationale is required. The PSD indicates that the rationale is that the new degree offers a route to a designated degree for those students unable to gain entry to Earth Science Honours. However, the Learning and Teaching Committee minutes refer to difficulties in delivering fieldwork and the fact that the standard Earth Sciences programme could be delivered without the fieldwork component and thus provide an exit point of a designated degree.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the BSc currently given at SciEng. 11(UG) of the University Calendar.

- Section 1: Query the rationale for the title being 'Earth Studies' rather than 'Earth Sciences'.
- Section 10: Transferable/key skills final bullet: move to Subject-specific skills
- Section 11: Under second bullet: mention of field-based exercises. Will these still take place within the designated degree?
- Section 14: replace all reference to regulations with standard reference.
- Section 14: Year 3: Delete '(100 credits)'; Can the list of optional courses referred to be included?
- Section 15: remove reference to University Health Service
- Spot check of consultation documents: One of the two students whose comments were received indicated a concern about the lack of fieldwork. Will the programme be viable/acceptable without the inclusion of fieldwork?

Given the points raised above, the Group did not consider that the proposal could be recommended to ASC at this stage. The Group will reconsider the proposal when the concerns above have been addressed.

## 2.5 MEng Biomedical Engineering (faster route) (New Programme)

**Rationale:** This proposal covers the faster route version of the BEng/MEng degrees in Biomedical Engineering that were introduced in 2010-11.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the Degrees of MEng/BEng/BSc Engineering currently on Sci.Eng.8(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 1: 'faster route' should not be part of the award title.
- Section 2.2: The award of MEng requires 600 credits. This should be reflected on the programme specification with 120 credits to be credited on entry.
- Section 9: final line should be a bullet.
- Section 10: Knowledge and Understanding: stem sentence should read: 'An MEng graduate will be able to:' Also at Intellectual skills.
- Section 10: Transferable/key skills: delete next two paragraphs, as final bullet list is sufficient.
- Section 12: Unnecessary detail on different kinds of lectures
- Section 14: as Year 1 of the programme is almost identical to Year 2 of the usual route, what additional teaching/support is required by 'faster route' students to make up for what has been covered by all other students in their Year 1?
- Section 14: remove reference to progress/entry requirements. Replace with standard provision on regulations:
  - "This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the MEng, BEng and BSc(Eng). The regulations include the requirements in relation to:
  - (a) Award of the degree, and
  - (b) Annual progress
  - (c) Entry to Honours

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

PSD: A4 – No evidence of consultations with students, employers or RIO. Were
these undertaken in the course of approving the associated programmes in 200910? Learning and Teaching Committee Minutes do not refer either to the
consultation with the external academic or to any other consultations previously
undertaken.

#### Conclusion:

Given the points raised above, the Group did not consider that the proposal could be recommended to ASC at this stage. The Group will reconsider the proposal when the concerns above have been addressed.

## 2.6 MSci Statistics and another subject (Major Change)

**Rationale:** The major changes being proposed arise from a review of the Statistics curriculum begun in 2009-10, resulting in programmes being refreshed to reflect recent developments in the discipline and specialised knowledge of new members of staff.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the Degrees of BSc and MSci currently on Sci.Eng.11(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: para 2: 'At the University of Glasgow...' to the end of the paragraph should be moved to section 15.
- Section 10: Knowledge and understanding, 2<sup>nd</sup> bullet: Suggest 'Apply' rather than 'build on' to indicate a knowledge that has been attained.
- Section 10: Subject specific: bullets 3 and 6 should be moved to transferable skills; Intellectual skills 1 and 4 should be moved to subject specific; Transferable skills: 3<sup>rd</sup> bullet move to Intellectual skills.
- Section 14: 1<sup>st</sup> para delete Single Hons not relevant on this programme specification.
- 2<sup>nd</sup> para states candidates must achieve 605 credits but structure indicates that course 88LW (15 credits) is optional and that candidates could complete the degree with other options totalling 600 credits; references to 'you' should be replaced with 'candidates'.
- Year 1 structure indicates that 40 Statistics credits in Year 1 are optional. What
  other courses would be recommended, and how would students who take
  Statistics courses in year 2 make up for what was taught in Statistics 1 courses?
- Years 3 to 5: remove paras 1 4, as too much detail for programme specification.
   Replace with statement:
  - "This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the BSc and MSci. The regulations include the requirements in relation to:
  - (a) Award of the degree, and
  - (b) Annual progress, and
  - (c) Entry to Honours

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/

- Curriculum for Year 3 indicate that numbers in brackets denote number of credits. Suggest using the same format as for Years 1 and 2 for clarity.
- Delete final paragraph, as not relevant to this programme specification.
- Section 15: Delete reference to University Health Service.
- PSD A1 indicates relevant regulations to be postgraduate MSc. Insert correct reference to SciEng.11(UG)
- PSD A4: no indication of consultation with students/RIO/employers. Learning and Teaching Committee minutes of 23 February do not indicate any detail of the scrutiny of consultations.

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 2.7 BSc (Hons) Statistics (Major Change)

**Rationale:** The major changes being proposed arise from a review of the Statistics curriculum begun in 2009-10, resulting in programmes being refreshed to reflect recent developments in the discipline and specialised knowledge of new members of staff.

**Regulations:** The programme will be governed by the generic undergraduate regulations and the supplementary regulations for the Degrees of BSc and MSci currently on Sci.Eng.11(UG) of the University Calendar.

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 2.2: total number of credits is 485 based on compulsory courses listed in section 14.
- Section 9: para 2: 'At the University of Glasgow...' to the end of the paragraph should be moved to section 15.
- Section 10: reassign bullets to appropriate headings as per 2.6 above.
- Section 14: 1<sup>st</sup> para delete Single Hons not relevant on this programme specification.
- Section 14: para 2 delete sentence 'Students may also take...'
- Section 14: remove reference to progress/entry requirements. Replace with standard provision on regulations:
  - "This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the BSc and MSci. The regulations include the requirements in relation to:
  - (a) Award of the degree, and
  - (b) Annual progress, and
  - (c) Entry to Honours

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Curriculum for Year 3 indicate that numbers in brackets denote number of credits. Suggest using the same format as for Years 1 and 2 for clarity.
- Delete final paragraph as not relevant to this programme specification.
- Learning and Teaching Committee minutes do not indicate any detail of the scrutiny of consultations.

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 2.8 BSc (Hons) Statistics and another subject (Major Change)

Rationale: As for 2.7 Regulations: As for 2.7

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 9: para 2: 'At the University of Glasgow...' to the end of the paragraph should be moved to section 15.
- Section 10: reassign bullets to appropriate headings as per 2.6 above.
- Section 14: Year 1 Statistics 1Y and 1Z information to be corrected; query requirement for Certificate of Basic IT Competence.
- Section 14: information regarding years 3 and 4 to be replaced by reference to regulations:

"This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the BSc and MSci. The regulations include the requirements in relation to:

- (a) Award of the degree, and
- (b) Annual progress, and
- (c) Entry to Honours

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Year 3 and Year 4 structure: remove reference to Single Hons and indicate that 60 credits from another subject are required. Remove paragraph headed 'Single Honours Programmes'.
- Learning and Teaching Committee minutes do not indicate any detail of scrutiny of consultations documents.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

## 2.9 BSc Statistical and Mathematical Studies (Major Change)

Rationale: As for 2.7 Regulations: As for 2.7

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

- Section 1 title given as Statistical and Mathematical Studies, whereas on PSD it is Mathematical and Statistical Studies.
- Section 9: para 2: 'At the University of Glasgow...' to the end of the paragraph should be moved to section 15.
- Section 10: reassign bullets to appropriate headings as per 2.6 above.
- Section 14: Insert reference to governing regulations:

"This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the BSc and MSci. The regulations include the requirements in relation to:

- (a) Award of the degree, and
- (b) Annual progress

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

 Learning and Teaching Committee minutes do not indicate any detail of the scrutiny of consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

# 2.10 MSci Statistics (Major Change)

Rationale: As for 2.7 Regulations: As for 2.7

**Programme Specification:** The Group considered the programme specification for this award, and raised several points requiring to be addressed:

#### Points for discussion:

- Section 1: title: delete 'with Honours'.
- Section 2.2: total number of credits is 605 based on compulsory courses listed in section 14.
- Section 9: para 2: 'At the University of Glasgow...' to the end of the paragraph should be moved to section 15.
- Section 10: reassign bullets to appropriate headings as per 2.6 above.
- Section 14: Years 3 to 5: remove paras 1 4, as too much detail for programme specification. Replace with statement:
  - "This programme is governed by the generic undergraduate regulations and by the supplementary regulations for the BSc and MSci. The regulations include the requirements in relation to:
  - (a) Award of the degree, and
  - (b) Annual progress, and
  - (c) Entry to Honours

See: www.gla.ac.uk/services/senateoffice/calendar/calendar2011-12/contents/"

- Final paragraph above Year 3 structure: Are all courses run at H and M level giving students free selection?
  - Final paragraph in section 14: delete.
- Learning and Teaching Committee minutes do not indicate any detail of the scrutiny of consultations.

#### Conclusion:

The Group recommends the proposal to ASC, subject to the issues identified above being addressed.

<u>Note</u>: PSD for Statistics programmes to be updated with removal of programmes not presented for approval.

## 3. SPOT-CHECKING OF PROPOSALS

Under the current process, Programme Approval Groups examine only the programme specification and support document for programme proposals. However, PAGs reserve

the right to ask for full documentation if desired. It was recommended in the recent Deloitte report that occasional 'spot checks' be undertaken on proposal documentation.

In line with this recommendation, the Clerk reported a sample of proposals had been selected for spot-checking, and that the full documentation for the proposals shown below had been examined:

- BSc Earth Studies Designated Degree
- MRes Advanced Statistics
- MSc Embedded Electronic Systems
- MSc Mechatronics