

Annexure 1 to E-14-P: Template for Visit Reports on BEng-type Programmes.

<p>Engineering Council of South Africa</p> <p>Accreditation Team Report and Recommendation on</p> <p><.....> Programme in <...></p> <p>University of <.....></p> <p>Draft: <..>/Final</p>	 <p>E C S A</p>
--	--

1 Institution, Programme and Team Details

1.1	University		
1.2	Department		
1.3	Qualification: Full title, including branch/option		
	Qualification Abbreviation		
1.4	Person Responsible for programme		
1.5	Dates of Visit		
1.6	Team	Leader	
		Member	
		Member	
		Member	
1.7	Observers: Name & Affiliation		
1.8	Type of evaluation: Regular Visit, Interim Visit/Report, or Final Visit		
1.9	Date of Previous Visit		
1.10	Decision of Previous Visit		

2 Background to the Visit

3 Criteria and Procedures Applied

4 General Observations

5 Detailed observations

Appendix A to the report gives the Team's evaluation against the criteria in E-03-P.

5.1 Follow-up on Previous Visit

5.2 Structure, Content and Knowledge Breakdown

5.3 Assessment of Exit-level outcomes

6 Quality of Teaching and Learning

7 Resources and Sustainability and Capacity for Improvement

8 Recommendation

9 Acknowledgements

As Team Leader, I certify that this report has been approved by the Team

Team Leader

Date:

Reported noted:

Visit Leader

Date:

Appendix A: Evaluation Form

Instruction: Use spaces marked with > to insert prose statement of deficiency, concern or comment as required

Criterion 1: Programme duration, breakdown, core, specialisation and designation

Question 1.1: Does the programme comprise not less than 560 SAQA credits?	Yes/No
>	

Question 1.2: Does the programme breakdown by knowledge area conform to the minima specified in the relevant standard? Use columns 3 & 4 in the table for reporting			
Knowledge area	Minimum Credits	Actual Credits	Complies?
Mathematics	56		
Basic Sciences	56		
Engineering Sciences	168		
Design and Synthesis	67		
Computing and IT	17		
Complementary studies	56		
Subtotal	420		
Discretionary	≥140		
Total	≥560		
>			

Question 1.3: Does the programme have a coherent core of mathematics, basic sciences and engineering sciences?	Yes/No
>	

Question 1.4: Does the programme have specialist study in as described in E-02-PE section 10.2	
>	

Question 1.5: A designation (qualifier) consistent with the purpose and the complement of engineering sciences?	
>	

Question 1.6: Does the programme have explicit rules of combination and horizontal and vertical articulation options	
---	--

>

Criterion 2: Qualification Exit-level Outcomes

<p>Question 2.1 and 2.2. Does the assessment within the programme</p> <ol style="list-style-type: none"> ensure that all graduates satisfy each exit level outcome defined in the relevant standard; use a documented set of assessment criteria and processes that, taken together, demonstrate that the outcomes are satisfied at the level indicated by the range statement; 	Team's Evaluation
Exit Level Outcome	
<p>2.1: Problem solving <i>Learning outcome:</i> Demonstrate competence to identify, assess, formulate and solve <i>convergent</i> and <i>divergent</i> engineering problems creatively and innovatively.</p>	See footnote ¹
>	
<p>2.2: Application of scientific and engineering knowledge <i>Learning outcome:</i> Demonstrate competence to apply knowledge of mathematics, basic science and engineering sciences from first principles to solve engineering problems.</p>	
>	
<p>2.3: Engineering Design <i>Learning outcome:</i> Demonstrate competence to perform creative, <i>procedural</i> and <i>non-procedural</i> design and synthesis of components, systems, engineering works, products or processes.</p>	
>	
<p>2.4: Investigations, experiments and data analysis <i>Learning outcome:</i> Demonstrate competence to design and conduct investigations and experiments.</p>	
>	
<p>2.5: Engineering methods, skills and tools, including Information Technology <i>Learning outcome:</i> Demonstrate competence to use appropriate engineering methods, <i>skills</i> and tools, including those based on information technology.</p>	
>	
<p>2.6: Professional and technical communication <i>Learning outcome:</i> Demonstrate competence to communicate effectively, both orally and in writing, with engineering audiences and the community at large.</p>	
>	
<p>2.7: Impact of Engineering activity <i>Learning outcome:</i> Demonstrate <i>critical awareness</i> of the impact of engineering activity on the social, industrial and physical environment.</p>	
>	
<p>2.8: Individual, team and multidisciplinary working <i>Learning outcome:</i> Demonstrate competence to work effectively as an individual, in teams and in multidisciplinary environments.</p>	
>	

¹ In this column insert a terse evaluation referring to both the quality and validity of the assessment and the level of acceptable performance demanded.

2.9: Independent learning ability <i>Learning outcome:</i> Demonstrate competence to engage in independent learning through well developed learning skills.	
>	
2.10: Engineering Professionalism <i>Learning outcome:</i> Demonstrate <i>critical awareness</i> of the need to act professionally and ethically and to exercise judgment and take responsibility within own limits of competence.	
>	

Question 2.3: Does the assessment process within the programme use appropriate policies and procedures to validate assessment through internal and external moderation of assessment tasks by appropriately qualified and experienced personnel?	Yes/No
>	

Criterion 3: Teaching and Learning Effectiveness of the Programme

What is the team's assessment of the effectiveness of the following aspects of the teaching and learning process?	Evaluation
<p>3.1 The content, learning objectives, expected outcomes and method of assessment for each module of the programme are defined and documented and are available to staff and students.</p> <p>3.2 The information considered in 3.1 makes clear, for each exit level outcome, the modules in which exit level assessment takes place, the method of assessing the exit level outcomes and the level of achievement required of the students.</p>	
>	
<p>3.3 The teaching and learning strategy and methodology is designed to achieve the outcomes of the programme with students who meet the stated admission criteria.</p> <p>3.4 Suitable learning opportunities are provided to facilitate the acquisition of knowledge and skills specified in the programme outcomes.</p> <p>3.5 The programme is effectively co-ordinated.</p> <p>3.6 The learning process encourages independent learning attitudes and abilities, and an appropriate mix and balance between different teaching and learning methods is maintained to encourage active participation of students in the teaching and learning process.</p>	
>	
<p>3.7: The learning progress of students is appropriately monitored and where necessary, academic development support is provided to students through structured and monitored interventions.</p> <p>3.8: Assessment practices and procedures provide feedback to students at regular intervals.</p> <p>3.9: An internal process including moderation ensures that all forms of summative assessment of student performance within programme are effective, fair, rigorous and address the stated learning objectives and outcomes.</p> <p>3.10: Exit level assessment is subject to external moderation.</p>	
>	
3.11: The teaching and learning process is monitored by an effective quality	

assurance process that supports continuous improvement. 3.12: Student retention and throughput rates are monitored and measures are taken to identify and address factors that adversely affect throughput. 3.13: The race and gender profile of the qualifying class increasingly resembles that of the entering class	
>	

3.14: Where the rules of the programme require work-based learning for credit toward the qualification, the academic provider ensures that such learning is executed effectively including:	
<ul style="list-style-type: none"> a) The learning objectives and outcomes to be achieved are defined and agreed with the workplace provider; b) Effective placement, of students in the workplace and ongoing communication takes place; c) Suitably qualified mentors, technically competent in the discipline and the art of mentoring are available in the workplace. d) Students are mentored in the workplace and their performance is monitored and recorded in relation to objectives; e) The student's performance and competence are assessed through a rigorous process: this assessment is the responsibility of the academic provider; f) Quality assurance of work-based learning processes by the academic provider ensures achievement of objectives in (a). 	
>	

Question 3: Does the programme provide an effective teaching and learning process toward achievement of the outcomes?	
>	

Criterion 4: Resourcing and Sustainability of the Programme

What is the team's assessment of the planning, resourcing, leadership, execution and sustainability of the programme?	Evaluation
<p>4.1: The level of selection of students is commensurate with the programme's academic requirements.</p> <p>4.2: The number of students admitted takes into account the capacity of the programme to offer good quality education and to meet professional requirements.</p> <p>4.3: The selection and admission of students is linked to the institution's equity and diversity plans.</p>	
>	
<p>4.4: The staff members responsible for leadership, planning and assessment at the exit level are professionally and technically competent in the respective disciplines. Registration with ECSA in the appropriate professional category provides the norm for professional standing.</p> <p>4.5: A strategy for recruitment, development and retention of academic staff is in place and is aligned with the diversity plan of the institution.</p> <p>4.6: Equity plans for improving the diversity profile of the unit exist and are aligned with the equity plans and the diversity strategy of the institution.</p> <p>4.7: The academic staff responsible for the programme are suitably</p>	

<p>qualified, have sufficient relevant experience and teaching and assessment competence.</p> <p>4.8: The number of academic and support staff is sufficient for the programme.</p> <p>4.9: The academic staff members have the range of specialities and abilities to teach at specialist and fundamental level that is required by the programme.</p> <p>4.10: Staff members have research profiles relevant to the programme. (See E-03-P Schedule 2: Research ethos & funding.)</p> <p>4.11: Appropriate research development opportunities and programmes for staff members are in place.</p>	
>	
<p>4.12: The allocation of funds and necessary resources to the school or department and appropriate utilisation of these resources by the school or department where the programme is located forms part of the institutional planning and quality assurance processes.</p> <p>4.13: Budgetary allocations for the programme are adequate and are effectively utilised:</p> <ul style="list-style-type: none"> a) Staffing budgets and resulting packages; b) Laboratory equipment; c) Computing and networking; d) Running expenses; e) Library facilities; f) Where applicable: work-based learning. <p>4.14: Office, teaching and laboratory accommodation and equipment are adequate.</p>	
>	
<p>4.15: User surveys, reviews and impact studies on the effectiveness of the programme are undertaken at regular intervals. The results are used to improve programme design, delivery and resourcing, and for staff development and student support, where necessary</p>	
>	
<p>4.16: Where academic development programmes for students are offered within or associated with the programme:</p> <ul style="list-style-type: none"> a)The programme is designed to meet student state of preparation and progression toward the main programme; b) Staff responsible for the academic development programme are adequately qualified, experienced and skilled; c)Funding for the programme is adequate; d) Realistic criteria are applied for acceptance of students into the academic development programme; e)The academic development programme is quality assured. 	
>	

Criterion 4: If the programme is free from deficiencies under Questions 1-4: Is the programme capable sustaining acceptable outcomes until the next regular accreditation?	Yes/No
If deficiencies are identified under Questions 1-4: Is the provider judged to be capable of and committed to remedying the deficiencies to the required level within 1, 2, or 3 years?	Yes:In _ Years/ No
Can all other aspects of the programme be sustained for the same period?	Yes/No
<i>If any question is answered "NO", insert the teams reasons for the finding(s) here</i>	

Question 5: Follow-up on previous visit decision

Question 5.1: In the case of concerns identified at the previous visit, have these been addressed by the university?	Yes/No
If No, does any previously identified concern rank as a deficiency?	Yes/No
<i>If no, identify the unresolved concerns here and assess the consequences of lack of resolution</i>	
Question 5.2: In the case of an Interim Report, Interim Visit or Final Visit, are there outstanding deficiencies from the previous visit report?	Yes/No
<i>If no, identify the unresolved concerns here and assess the consequences of lack of resolution</i>	