A University in Transition:

Engineering Accreditation for a Sustainable Economy EASE



In Collaboration with



FACULTY OF ENGINEERING & TECHNOLOGY

ABET ACCREDITATION COMMITTEE

WHY ACCREDITATION?

Accreditation Board for Engineering and Technology (ABET) is a U.S.-based accreditor of university programmes in applied science, computing, engineering and technology

- ✓ It assures post-secondary education meets established quality standards
- ✓ ABET works alongside Guyana's higher education quality assurance organization (NAC)
- ✓ It provides periodic external assessment and evaluation through the
 programme's continuous improvement (CI) process

CONTINUOUS QUALITY IMPROVEMENT (CQI)

An educational program CQI process must define:

- ✓ Mission
- ✓ Constituents (students, faculty, alumni, employers, IAB)
- √ Objectives
- ✓ Outcomes
- ✓ Processes (internal practice to achieve the outcomes)
- √ Facts (data collection)
- ✓ Evaluation (interpretation of facts)
- ✓ Closing the loop by follow-up actions

ABET ACCREDITATION PROCESS CRITERIA

A **Self-study Questionnaire** used as a template to address these Programme areas:

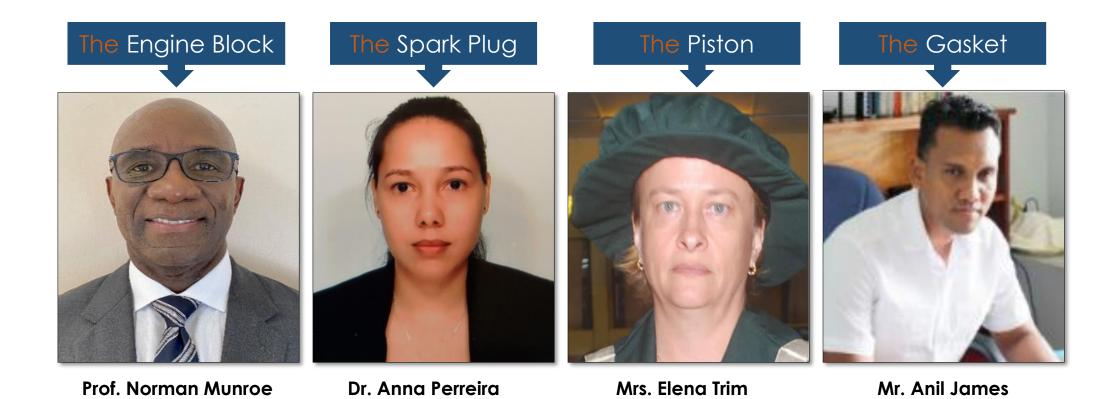
Criterion:

- 1 Students
- 2 Program Educational Objectives (PEOs)
- 3 Student Outcomes (SOs)
- 4 Continuous Improvement (CI)
- 5 Curriculum
- 6 Faculty
- 7 Facilities
- 8 Institutional Support



UNIVERSITY OF GUYANA ABET ACCREDITATION COMMITTEE

ESTABLISHMENT OF THE ABET COMMITTEE





ABET ACCREDITATION TIMELINE

Submit request to ABET for programme accreditation Initiate data collection of core courses Committee members attend ABET workshop **PROCESS** Facilities upgrade YEAR 7 Conduct mock review Submit request for ABET evaluation Plan for ABET visit

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1	Submit letter to ABET requesting accreditation for programmes	
2	Champions to request ABET Team Lead & Program evaluators	
3	Provide samples of ABET reviews	
4	Allocate lab upgrade funds	
5	Initiate data collection for the core courses	
6	Attend ABET workshop for Champions	
7	ABET Retreat for Faculty– Grand Coastal	
8	FET Lab committee walk through (need to identify an outsider – OSHA, IDCE, etc.)	
9	Workshop for Faculty with ABET Expert – On Campus (HOD, Full time faculty + staff)
10	Update faculty on ABET accreditation progress (at FBM)	
11	Establishment of advising unit	
12	Monthly ABET Progress Meeting with HoDs, Advisors (at FBMs)	
13	Monthly ABET Progress meeting with faculty board (at FBMs)	
14	Facelifts to building (office, classrooms, circulation space, washrooms)	
15	ABET update at FBM	
16	Lab upgrades to be completed	
17	Finalize ABET report and submit to PEVs	
18	Coordinate mock review with UG administration and support units:	
19	Architecture, Civil, Electrical, Geology, Industrial, Mechanical	
20	Conduct mock review with UG advisors	
21	Review and revise ABET report based on comments from PEVs	
22	Submit a request for evaluation to ABET	
23	Lab Committee walk through	
24	Monthly ABET Progress Meeting (at FBMs)	
25	Final ABET submissions	
26	Planning for ABET visit	
27	Walk through	
28	ABET visit	

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On-going Work

STRENGTHS WEAKNESSES OPPORTUNITIES & THREATS (SWOT) ANALYSIS

Without adequate funding and the infusion of resources including facilities, qualified faculty, classrooms, research laboratories, etc. it will not be possible to secure international accreditation of programmes in the FET.

Information gleamed from the SWOT Analysis motivated the preparation of a proposal entitled, "Engineering Accreditation for a Sustainable Economy (EASE)" to secure funding for ABET accreditation.

Your Contribution

ABET

Facilities & Equipment Upgrades

- Adequate space for faculty
- Classrooms
- Laboratories
- Drafting Studio
- Computer Laboratory
- **Smart Classrooms**
- Equipment for Mechanical Workshop
- Materials for 3D printer
- Laboratory equipment (Petroleum & Geological Engineering programmes)

Your Contribution



Faculty Recruitment & Development

- More qualified faculty
- Enrollment of Faculty in PhD Programmes
- More IT infrastructure and Internet reliability
- Increase student enrollment
- Establish Community Projects
- Develop Graduate Programmes
- Promote Engineering Research







Vision Statement

To be a globally and nationally valued, student centered - research and teaching University, that prepares our students to contribute to the balanced development of Guyana and the broader global community.



Your Contribution



Mission Statement

To be a premier national university that facilitates an environment to face academic freedom and scholarship which allows for free and critical enquiry that empowers our students and staff to discover, generate, disseminate and apply knowledge of the highest standard for service to the community, the nation and all mankind.



ABET

Strategic Goals

- Be the premier Caribbean university in energy technologies and their applications
- Advance the concepts and technology of our professionals
- Engage the expertise of global professionals
- Foster and recognize best practices in engineering education
- Provide leading, cutting-edge tertiary education focused on sustainability in engineering and the built environment

Strategic Objectives

- Focus on obtaining and retaining ABET accreditation
- Recruit and retain the services of highly qualified engineering professionals
- Produce and deliver high quality engineering educational programmes
- Engage the expertise of strategic global partnership and professionals
- Provide cutting edge research and facilities in renewable energy and industrial systems

Establish Programme Education Objectives (PEOs)

aligned with Guyana's strategic foci of green sustainable technologies, agriculture, climate change, mining, and manufacturing.



ABET

ABET ACCREDITATION COMMITTEE

The assessment process used to gather data for the evaluation of each student outcome requires input from: Industry committee advisory meetings (ABET Self Study Questionnaire, 2018)

Developed Terms of Reference for IAB

- Professional Advisors
- Departments Advisory Board

Established Student working group

- Purpose
- Student portfolios



Your Contribution

Update: Student Working Group & Departments Advisory Board

Three meetings held with the student working group:

- Formation
- Guidance on collection of data
- Student consultation (online)

Formation of IABs is a work in progress

- Departments: Mechanical, Electrical, Civil, Architecture & Industrial
- Support from Industry & Alumni

YOUR CONTRIBUTION TO ACCREDITATION

CONSTITUENCIES' SURVEY Thank you for the support!