



PROGRAMME REVIEW REPORT



Bachelor of Industrial Studies Honours Faculty of Engineering Technology Open University of Sri Lanka

Site Visit Date: 10th March 2023



**Review Panel: Prof G. Mikunthan
 Prof R.A.R Prabodanie
 Dr. G. Indika Perera**

**The Quality Assurance Council
University Grants Commission, Sri Lanka**

1. University : Open University of Sri Lanka
2. Faculty : Faculty of Engineering Technology
3. Program : Bachelor of Industrial Studies (Honours)
4. Review Panel :

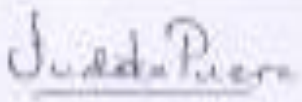
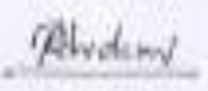
No	Name	Signature
1	Prof G.Mikunthan	
2	Dr.G.indika Perera	
3	Dr.R.A.R.Prabodanie	

Table of Contents

Section 1:	Introduction to Programme	01
Section 2:	Observations on SER	04
Section 3:	Description of Review Process	06
Section 4:	Faculty's Approach to Quality and Standards	08
Section 5:	Judgment on each of the 6 criteria	10
Section 6:	Grading of Overall Performance	18
Section 7:	Commendations and Recommendations	19
Section 8:	Summary	27
Annexure :	Site Visit Schedule	29

Section 1: Introduction to the Programme

In the Sri Lankan Higher education system, the Open University of Sri Lanka (OUSL) has evolved into a unique higher educational institution by practicing Open and Distance Learning (ODL) methodology since 1980. The OUSL is the solely recognized University in this country, which conducts many degree programmes in frontier with the ODL mode of delivery. The OUSL main premises at Nawala is the nucleus center with all the required facilities including Temporary Residential Facilities (TRF) to the students. The university has decentralized its administration and operations across 9 regional and 18 study centers located in most of the Provinces of Sri Lanka.

Timely delivery of programmes, provision to enroll and to sit for the exams at any regional/study center across the country preferably in nearby areas, and flexibility in selection of courses from diversified subject areas are some outstanding benefits ODL educational system at OUSL, compared to the conventional system. The ODL mode enables a higher level of student engagement and stronger association with the university compared to the mode of External Degree Programmes. Degree programmes delivered in ODL mode cater diverse student communities who intend to pursue their higher education in multidisciplinary fields. In addition, generating income to meet all its capital as well as recurrent expenditures other than staff remuneration is strength of the OUSL, a best fit operational model ensuring sustainability of a state higher educational institution in a country that undergoes severe economic crisis.

Over a period of more than two decades of development, the Faculty of Engineering Technology has emerged as one of the outstanding faculties of this University. The faculty has six departments collectively offering three undergraduate degree programmes. The Bachelor of Industrial Studies (Honours) [BIS] degree programme is one among the demand driven extensive programmes offered by the faculty. This programme was designed by the Department of Agricultural and Plantation Engineering for those engaged in an industry or have desire to join an industry. The eligibility requirement is just three passes at GCE (A/L) exam or equivalent. This is a unique programme which offers specializations in Agriculture, Apparel Production and Management, Fashion Design and Product Development and Textile Manufacture.

The BIS has been designed to include all aspects of necessary engineering and industrial competencies by specifying a minimum number of credits for different course combinations in Engineering, Industrial Projects, Mathematics, General Management, English proficiency and Computer literacy. The engineering and industrial category courses are essentially supported by well-equipped laboratories and classes are mostly conducted at the main campus at Nawala, while lower-level courses are offered at the Regional Centres with adequate facilities. Together with compulsory courses, the students have the freedom to select optional courses to meet the credit requirements for an award, which is a peculiar model that suits to cater the diversity of students and their needs.

Initially, this programme has been introduced as a Diploma in Apparel Production and Management in 2000; then by adding specializations the programme was upgraded to a degree programme in 2002/2003. Agriculture specialization was introduced in 2004 providing an opportunity for students to acquire agriculture related education while being employed. It facilitates the employees in agro-based or agro industries to upgrade their knowledge in agriculture to make agriculture sector more sustainable. Through this education mode, agricultural extension officers have ample opportunity to study various aspects of agriculture.

In addition, Day schools, Industrial Training and Undergraduate Research are also incorporated into the study programme to enhance the practical knowledge to the students.

The Diploma in Apparel Production and Management was initially offered in 2000 by the Department of Textile and Apparel Technology and then it was brought under the new Industrial Studies Programme, as one of the specializations in 2002/2003. Hence the Bachelor of Industrial Studies (Honours) Programme commenced in 2002/2003.

Table 1.1: Number of students in Faculty/programme – Bachelor of Industrial Studies Breakdown in years [2019 – 2022]

Academic Year	Specific Description	Enrolled Students		
		New Registration	Re Registration	Total
2019	Agriculture	81	278	359
	Apparel Production and Management	91	285	376
	Textile Manufacture	9	24	33
	Fashion Design and Product Development	175	252	427
2020	Agriculture	96	245	341
	Apparel Production and Management	56	-	56
	Fashion Design and Product Development	139	269	408
	Industrial Management	01	-	01
2021	Agriculture	45	239	284
	Apparel Production and Management	69	169	238
	Textile Manufacture	09	20	29
	Fashion Design and Product Development	212	295	507

2022	Agriculture	51	-	51
	Apparel Production and Management	121	-	121
	Textile Manufacture	09	-	09
	Fashion Design and Product Development	333	-	333

The review team observed that the programme entertained relatively high number of enrolments. However, in 2022 enrolment has decreased to 50%. The enrolment must be sustained to avoid drop in the income generation as well as utilization of the resources at its maximum.

Table 1.2:Maximum number of students enrolled in – Bachelor of Industrial Studies - Last four years [2019 – 2022]

Reg. Academic Year	Registered Student counts
2019	1195
2020	1015
2021	1059
2022	514

Enrolment of students to various specialization programmes is satisfactory, perhaps Textile manufacture needs to attract more students compare to other specialization.

Over the years of the review period, students graduated have increased. However, due to the COVID 19 there has been a drop in this number. However, Textile Manufacture specialization must attract more students in the future by focusing on the technical skills since at present number it is low as indicate in the table.

Table 1.3: Numbers graduated from the Bachelor of Industrial Studies (Honours) programme - 2016 – 2020

Academic year	Bachelor of Industrial Studies [Specialization details]				Passed out students
	Agriculture	Apparel Production and Management	Textile Manufacture	Fashion Design and Product Development	
2016	37	19	01	06	63
2017	28	18	-	14	60
2019	42	-	-	-	42
2020	42	25	02	14	83

Section 2: Observation on Self Evaluation Report

The Self Evaluation Report for the Bachelor of Industrial Studies (BIS) Honours Degree programme has been prepared and submitted to QAC-UGC by the Faculty of Engineering Technology (FET) of the OUSL in 2020. It complies with the guidelines stipulated in the Manual for Review of Undergraduate Study Programmes of Sri Lankan Distance Higher Education Institutions published previously by Commonwealth of Learning (COL) as Quality Assurance Tool Kit: Distance higher education institutions and programmes 2009 and then modified and published by The University Grants Commission of the Ministry of Education, Sri Lanka, in 2019.

It was learnt from the SER that a mechanism was devised to write the SER. After obtaining the approval for the Standard Operational Procedure for implementing Programme Review (PR) at OUSL from the University Senate, a steering committee was formed comprising both academic and administrative staff members, under the Chairmanship of Dean/FET. The chairperson of the BIS was appointed by the faculty board and at the first meeting 6 groups were formed to work out those 6 criteria. A team leader was appointed for each working group which includes a member from each department of study. In addition, 15 non-academic staff members were incorporated into the working groups comprising 5 Technical officers, 5 Management Assistants and 5 lab attendants giving opportunities essentially to the non-academic staff to get involved in QA process.

Under the guidance of FQAC, several awareness sessions, discussion sessions, and brainstorming sessions were carried out and as an outcome, it is noteworthy to report that all categories of staff were involved to develop SWOT analysis and compiling the SER. Further SER writing team, SER Editing team as well as SER working groups were formed and their progresses were monitored until getting the final document. The above arrangement showcases the participatory approach of all staff members in the committees and groups for writing the SER as well as preparing evidences for all those standards. Finally, the SER was prepared through a rigorous collective effort under the leadership of the chairman of the group. The SER also cross checked and finalized by the experienced External PR reviewer of the University and further improved by getting feedback from the faculty members. The mechanism adopted in compiling SER exemplifies internalizing QA by engaging all the Academic, Administrative and Non-academic staff members and internal QA experts.

In the SWOT analysis, the SER identified 15 strengths that appear in Appendix 18 (page 185). However, the students can enroll and write the examinations in any of the study Centers in the country; timely conducting the programmes in all regional Centers and high self-income generation mechanism are also to be added to the list. The SER writing team identified 18 weaknesses. In addition, weak mechanism of student appeal system and lack of grievance and redressal mechanism can be considered as other weaknesses. Mechanism on Gender Equity and Equality

was not in existence at the time of submission of SER. However recently initiatives have been taken to implement this at the faculty level.

The faculty has undergone Institutional Reviews (Appendix 18 of SER) as well as subject reviews (Appendix 19 [A-1 and A-2] of SER) and most of the recommendations given in those reviews have been addressed and implemented. The recommendations of the reviews were transformed into an action plan incorporated in to the Strategic Management Plan of the University and implemented with the approval of the Senate and Council. This follow up action helped the QA system of the University and FET in particular to disseminate the QA process and activities further among the staff and students by introducing and adopting those good practices. The review team noted that this QA enhancement mechanism is also extended to some of the Regional Centers such as Kandy and Matara and is expected to extend to all remaining regional Centres in the future.

The BIS Honours Degree programme reflects the mission, goals and objectives set in the Corporate Plan and the Student-Centered Learning as well as Outcome-Based Education approaches have been adopted along with the prescribed graduate profile. The graduate profile is very clear and resonating in to the programme with a well-developed curriculum and its delivery as a whole. The team wishes to endorse that the standards and quality are in accordance with the national (SLQF) guidelines. There is no Subject Benchmark Statement [SBS] for this degree programme yet, and it needs to be developed in the future in consultation with QAC-UGC.

Section 3: Description of Review Process

As per the instruction of QAC-UGC this programme review is based on the Self Evaluation Report submitted by the Faculty of Engineering Technology (FET) as per guidelines stipulated in the Manual for Review of undergraduate study programmes of Sri Lankan Distance Higher Education Institutions. The review was conducted purely based on the evidences provided and exhibited by the Faculty members, both in the e-version as well as in hard copies. The review process also included the observations made during site visits to the selected places at the Main University Premises by all three reviewers and to the nearby places of Regional Centres namely Kandy, Jaffna, and Matara individually.

The review team has perused the SER of BIS, which was submitted in June 2020 but the review is held in March 2023. As per the instructions of the Review Guidelines, the team has to look into the period of 2016-2020 (five years) and the review is purely based on the evidences submitted. Due to various reasons the review is taking place after 3 years of the submission of SER. Hence the Review team has taken up a wise decision, in consultation with the Director of QAC-UGC, to consider the developments and a progress taken place after submission of SER and until the review is taken place (of approximately 3-year period).

After the Desk evaluation, the Chair of the review team contacted the Director/QAC-UGC to obtain the contact point of the FET. Then the Coordinator - FQAC was introduced by the Director/QAC-UGC to discuss and schedule stakeholder meetings on-line and followed by a day site visit.

Further due to the existing economic crisis in the country the review process is modified by the QAC-UGC and accordingly online meetings with the stakeholders were held on 24.02.2023 and one-day site visit to OUSL was arranged on 10.03.2023 to the Review team for confirming the physical verification of the facilities and evidences. Accordingly, soft copies of the evidences uploaded in the CQA website of OUSL were perused. Since the programme is also conducted through the Regional Centre and hence the review team discussed with the faculty to make arrangements to visit the nearby regional centres. Accordingly, each member visited nearby regional Centres (Kandy, Jaffna and Matara) to learn more on the functioning and facilities available before having stakeholder meetings and site visit at the OUSL.

The stakeholder meetings (Annexure 1) were arranged by the Coordinator-FQAC in consultation with the Dean, Chairman of the PR Group and the review team had discussion with Dean and Academic Heads of the Department, Permanent Academic staff, Staff from ELTD, Directors of Centres such as Centre for Educational Technology and Media (CETMe), Centre for Gender Equity and Equality, Centre for Quality Assurance, Industry Liaison Centre, Physical Education, Research Unit, International Relations Unit, Information Technology Division, Industrial advisory board members, students and alumni on 24.02.2023.

After the Stakeholder meeting the site visit (schedule – Annexure 2) was held on 10.03.2023. The review team met the Vice- Chancellor, Dean, Director/CQA, Coordinator/FQAC, Directors of Centres and Units, Students, Non-Academic staff and visited all the centres especially CETMe, Operations, International Relations Unit, Information Technology Division, Gender Equity and Equality, laboratories, Library, Student Welfare Office and Colombo Regional Centre. The review team was highly impressed with the facilities available in these centres especially CETMe with all the audio, video, lecture recording facilities, publishing unit. Due to various reasons the Wrap up meeting was not held on the same day of site visit, and after finalizing the scores and preliminary report the wrap up meeting was held on 11.04.2023 via online.

The review team acknowledges the support extended by the Vice-Chancellor, Dean/FET, Director/CQA, Coordinator of FQAC, Directors, Heads, Professors and other staff members for the valuable discussions at the Stake holder meetings as well as when physically visited their places. The site visit was very fruitful to view the facilities available at the main University as well as given provision to peruse the original evidences easily arranged in an order.

The evidences found in some of the standards and the evidences kept in the folders with the e-versions uploaded were inadequate. However those evidences were found in some other folders as well as in the hard copies provided. The review team realized the difficulties due to scanning the entire documents, particularly those relevant pages, keeping them in order and uploading them in the CQA website to be perused by the reviewers. The missing information and evidences were clarified during the stakeholder discussions as well as perusing the original evidences during the site visit. The Coordinator of FQAC and the SER writing team, Directors of Centres, Heads of Departments arranged the evidences in d order to check that information within the available time and assisted the review team to confirm their existence. The SER and QA teams received the appreciation of the review team for their tireless effort.

Section 4: Faculty's Approach to Quality and Standards

The University has an apex body for quality enhancement, the Centre for Quality Assurance [CQA], which was established in 2019 as a Senate Standing Committee based on the UGC Circulars 04/2015 and 09/2019; Universities act, OUSL ordinance and through University By-Law # 14. The CQA Senate Standing Committee is chaired by the Vice-Chancellor, and it includes Deans of the Faculties, Directors of various Centres (CETMe), Regional Educational Services [RES], Staff Development Centre, Public information and Student Welfare), representatives of faculty quality assurance cells (FQAC) and administrative divisions, representative of Academic division. All QA matters of all faculties are discussed and monitored at the CQA Senate Standing Committee, and the good practices are shared among each other. The summary of the minutes of the CQA Senate Standing Committee is placed to the Senate for observation.

The Senate Subcommittee of CQA plays a significant role in planning, coordinating, organizing, and executing all the Quality Assurance (QA) related activities as well as monitoring the activities of FQACs of OUSL. The QA cell established for Administrative Units helps to disseminate the QA activities among the administrative and non-academic staff. Further the participation of Director of RES and selected representatives from RES at the CQA Senate Standing Committee helps further to disseminate the QA activities in their extended entities.

The University level CQA has the Faculty Quality Assurance Cells [FQACs], of which the FET has established the Faculty Quality Assurance Cell (FQAC) at the faculty in 2019. FQAC of FET has a Coordinator with a faculty subcommittee to accelerate its QA functions within the faculty. The members of the faculty sub-committee include representatives of all the 6 departments, representatives of selected (04) Regional centres.

The FQAC at FET is responsible for coordinating all QA related activities, facilitating the implementation of QA reviews/monitoring follow up action, providing guidance and monitoring of Department level QA activities, sharing good practices between academic departments, conducting Faculty level QA related awareness programmes for staff members and students, preparing annual action plan for the Faculty and obtaining approval from Senate before commencement of a calendar year, reporting QA activities at Department, Faculty Board and the Senate Sub Committee on QA meetings, conducting/facilitating QA related research work of the Faculty and dissemination of QA outcomes through printed and electronic platform.

The outcome-based education and student centered learning approach in the ODL methodology is adopted in the BIS Honours degree programme through an intrinsic mechanism. ODL mode was facilitated by self-instructional course materials together with supplementary online materials, videos and audios being the main modes of teaching developed by the faculty course Development Committee and University course development committee.

CETMe provided the necessary training and monitoring of ODL methodologies. The self-instructional course materials were developed under the monitoring of Course materials development committee by the Course team includes academic staff internally with the assistance of staff from other Universities and industry experts. The mechanism exists at OUSL ensuring quality from the development of course materials, monitored at various levels including delivery of the course by FQAC.

The CQA of OUSL has the QA Cell for admin and this enables all the administrative and academic support staff to participate and contribute to QA activities. The existences of QA cell for admin bestow the direct link with the CQA for the dissemination of the good practices across the staff members and gives an opportunity to be part of the QA review process.

Few of the regional centres are invited to take part in the CQA meetings. However such opportunities have to be extended to all the regional centres to internalize the QA system further into all the peripheral units.

Section 5 - Judgment on each of 6 criteria

Criterion 1: Programme Management

The OUSL has an organizational structure for effective management and especially operating 9 regional centers and 18 study centers across the country in consistent with the vision and mission and cooperate plan of the University to engage in Open and Distance Learning. The comprehensive institutionalized system, which is responsible for revision of the BIS Honours degree programme considers internal and external consultations, feed backs obtained from students and employability survey. The student selection has clear criteria, and that selection information was published in local newspapers and website.

The students can enroll themselves in examinations at any of study centres facilitating them to minimize the travel and especially in a situation like isolation due to COVID. The students are accessible to the prospectus and hand book when enrolled and these explain all the essential information and directions. The programme has ample flexibility in selection of subjects by the students. Further existence of in-house ticketing system to the students to send emails to the respective sections as well as to opt and change subject combinations of their preference.

A mechanism exists through Learner Support Unit handling academic counseling, mentoring, student counseling, psychosocial counseling especially access to health care services and facilities to the students. In addition, provision of support is evident to special need/differently able students. A well-established Management Information System (MIS), which even diagnose the group credit requirements. Facilities through the new PABL system of new software meet the requirements of the administration for free calls to Contact Learner support system at the main premises of the University. Students have access to the Libraries at the University as well as in the regional centres and sufficient IT facilities including accessibility to computer terminals.

Centres of Educational Training and Media (CETMe), Operations, External Resource Services (ERS), Gender Equity and Equality, National On-line Distance Education Service, IT educational service and Quality Assurance are supportive enough to cater the programme effectively.

Staff Development Centre and CETMe are well developed with sufficient cadres and joint together to provide necessary training to all the staff members including Academic, Administrative as well as Academic support staff.

The faculty adopts zero tolerance policy to ragging, adheres fully with institutional bylaws, however reported incidents are minimum after COVID. The FQAC involves. Regular monitoring and reporting to faculty, in addition existence of QA cells for admin as well as for Regional centers are also

supportive in strengthening QA activities. In a long run, each regional center needs to have QA cell to disseminate QA enhancement across the programme.

Since the faculty has a powerful and resourceful alumnus of this degree programme, stakeholder consultations need to be assured. The linkages with all levels of stakeholders especially potential alumni and industrial experts outside the faculty are not utilized while carrying out curriculum revision. As pointed out by the alumni, their expertise and experience are not well utilized in the revision of curriculum, quality enhancement process and delivery of the programme. The mechanisms available to ensure functional integration and equal educational quality of the programmes conducted in all the regional/study centres are also weak. The review team witnessed the facilities found in regional centres in Kandy and Jaffna during the visits. However, the regional centre at Matara needs further expansion to cater the needs of the students. Further it is essential to comply with the institutional policy to promote Gender equity and equality, which is not in existence especially the statutory board like the faculty board.

Criterion 2: Programme Design and Development

The BIS Honours degree programme is consistent with the mission, goals, and objectives of the University. The programme complies with SLQF in terms of volume of learning, level descriptors, qualification descriptors. The curriculum reaches its richness by incorporating professional, interdisciplinary and multidisciplinary courses, which are available to the students to select the combination. The University conducts StART@OUSL programme supporting the students at the enrolment to be fit into the ODL mode. Further the policies and procedures maintained in bylaws, rules and regulations are recommended by faculty board and Senate and approved by the Council.

The ODL mode is well facilitated by providing self-learning materials which are designed for learner friendly, self-explanatory and self-contained. These pilot tested, readily made, technically compiled self-learning materials are directing the students to evaluate themselves. A unique and quality practice is instituted by forming a team to develop the contents, technical editing, proof reading, editing, which were approved and published by the OUSL. These learning methods supported by the provision of appropriate learning materials for ODL enhances student centred learning.

The graduate profile was used as the basis to develop the BIS degree programme, and SLQF requirements are satisfied for alignment of credits. The Programme has a compulsory *in plant Training* Programme in its credit.

The active involvement and participatory approach of non-academic and technical staff, alumni and external stakeholders such as industrial experts, key employers of professional bodies in programme development, review, and quality assurance programmes is weak. Further the periodical review of the degree programme in consultation with wider stakeholders is not taking

place. Also the evidences on incorporating comments/suggestions of stakeholders in to the revision of the study programme are not kept for review. In addition, less importance is given towards the industry–university relationship to find adequate number of relevant industrial training opportunities.

Criterion 3: Course Design and Development

The review team observed evidence that all the courses of the Bachelor of Industrial Studies degree programme has been designed and developed by a course team consisting of experienced academic staff, taking into consideration the recent developments in the relevant industries. Appropriate standard formats is used for developing course profiles for each course and are made available to the students in print and digital formats. Course profiles include learning outcomes, course contents, teaching and learning methods, assessment methods, and recommended reading. The degree programme consists of core and elective courses and these courses have been designed with an appropriate balance with respect to SLQF notional hours among reading, discussions, laboratory work, field work, independent learning are acceptable.

Well-equipped facilities (mainly CETMe) are available for the production and dispatch of printed, audio and video course material are available. A clear copyright clearances mechanism is used in preparation of the learning materials. A team approach is adopted in design, development and delivery of course material. The team include content developers, instructional designers, graphic designers and content editors as well as language editors.

The content in the BIS degree programme possesses courses/modules with ILOs aligned with the programme ILOs. The staff members involved in instructional design and development have received training through the SDC as well as CETMe. The workload is fairly evenly distributed among the staff members. Adequate physical and human resources are available for course design. The instructional package is comprehensive and contains learner-friendly descriptions. Blended learning approach is widely practiced maximizing student engagement in various learning activities.

The review team notified that though the course design and development policy includes quality assurance, there is little evidence of quality assurance personnel involvement in course design. No standard procedure is found for course review and revision. Further there is no direct mapping of learning activities vs. CLOs and assessment methods vs. CLOs to illustrate which CLOs are achieved through each learning activity and which CLOs are assessed via each assessment method.

Also no evidence is found exhibiting mechanisms to encourage linkages with national and international agencies for course design and development.

Criterion 4: Learning infrastructure, Resources and Learner Support

The infrastructure facilities available at the University main premises as well as regional centres except few for the BIS degree programme are commendable. The regional centres at Jaffna and Kandy have new buildings with mobility for differently able students. Learner support services are given a prominent organizational status, and it has a Director for accelerating its functions in the University. The programme is conducted with the scheduled timeline and credibility of timely operation of the programme and assessments.

There are adequate facilities in the new buildings to the learners with special needs to support ODL, and these are reflected in the long-term plans and budgets. There is an effective human resource development system exists during selection of the staff members and through SDC as per the action plans and motivating them to engaging in postgraduate studies and research. To facilitate this there are number of journals and conference proceedings too are available.

The library resource centre at the University has adequate and up to date reference materials, in addition, the regional centers also have library facilities, SMART classrooms with necessary resources. The review team is satisfied with the availability of appropriate equipment and physical facilities for the practical based courses of the BIS honours degree programme. However the instruments appear to be old and need technological advancement with the support of latest equipment to facilitate training. Research facilities are available to the staff members to engage in research and are also extended to the students who carry out their final year research. Their findings are presented in the University conferences as well as peer reviewed journals and published in journals of the University. Since most of the publications are found in the journals published by the institution and therefore a mechanism has to be developed to encourage the staff members to publish in high impact journals.

The BIS Honours degree programme ensures quality delivery especially supplying print, audio-video CDs, video conferencing, computer-based instruction, online teaching based on the nature of learners, learning objectives. This was facilitated by engaging instructors who are given orientation, necessary training, and support to distance education.

It is noticed that user-friendly facilities are in existence including to those with special needs. This was also witnessed in the new buildings at the regional centres visited having provision of easy mobility to the differently able students.

Although the MIS network exists in the University caters the needs of the learners. However the review team felt that a policy is needed to include selection and effective use of latest and appropriate electronic devices and provision of internal and external networks.

The OUSL has appropriate and adequate learner support system, a designated administrative unit headed by a Director, with a mechanism of regular evaluation especially comprehensive, contact sessions, peer support and academic and personal counselling and targets retention and prevent learner dropouts.

Academic and career counseling is provided adequately by qualified staff, however especially psychological counseling needs to be further established with the institutional support.

The inclusive educational environment of the OUSL extended with 9 regional Centres and 18 study centers needs to have provision for academic/student counseling and monitoring, Learner support and Career guidance. The green policy of the OUSL will support nature driven environment.

The issues raised among the staff and students are addressed by Student appeals committee as well as Grievance and redress mechanism with the support of a Grievance Redress policy and defined memberships with TORs.

The BIS degree programme is collaborated with the industries for the industrial training. However this has to be evaluated and strengthened especially for the career-based learning experiences. Further finding suitable industry for the industrial training programme is experienced difficult by the students therefore a mechanism need to be developed by having prior arrangement for the students by the admin. The FET has an alumni association, and their networking can be further strengthened by engaging them in the curriculum revision, especially to fix the students in industrial training.

The FET monitors completion of students graduation rate and employment rate regularly and any abnormality is addressed after carrying out remedial measures.

The programme needs to include newer machines with advanced technologies in demonstrations for the practical based courses of Textile Production, Agricultural Machineries sections have old machines for demonstration, though meant for explaining the fundamental, however need to update the practical training on par with the technological advancement. The technical staff and the laboratory attendants are to be trained on recent advancement technologies and their knowledge and hands on skill need to be upgraded.

Mobility in the Natural Science building need to be improved, where most of the departments and especially office and labs of Agricultural and Plantation Management situated are in third floor, and Dean's office in second floor. Although there is a provision of a lift in the building, it is found malfunctioned. This exhibits difficulty to the staff members to climb several times a day as well as students with special needs.

There is lack of a policy for active learner participation in areas that affect the welfare of the students such as peer counselling, co-curricular activities as well as community engagement. Also, the partnerships with external stakeholders such as employers, societies and local communities are found to be weak.

Criterion 5: Learner Assessment and Evaluation

An assessment strategy of student learning is in operation and an integral part of the BIS honours degree programme. Student assessment policies, regulations, and processes with reference to SLQF are in existence. Formative and summative assessments are appropriate and are integrated into teaching and learning strategies. Formative assessments are done and feedback from students obtained.

A mechanism of ensuring reliability and fairness of assessment methods is in existence and independent external scrutiny to evaluate and improve the management of student assessment. FET ensured confidentiality of the assessment documents and records and has approved procedures for designing, setting, moderating, marking, grading, monitoring, and reviewing the assessment methods and awards in a systematic manner.

Regular training and discussions are found for the methods of assessments to staff and students and evaluating the physical fitness to undertake their roles and responsibilities. The programme adopts a well-defined marking scale, marking scheme, various forms of internal second marking, and procedures for recording and the relevant information are clearly communicated to students.

There is a clear policy on external/second examiners, their assessment and maintenance, existence of Examination (assessment) policies and procedures that provides differently abled students with the same opportunity as their peers to achieve learning outcomes.

Broad based assessment is in existence that has diversity in conducting formative and summative examinations including day-schools, industrial training and field-based training.

An inadequate mechanism of learner assessment for differently abled students to facilitate them to be on par with other students observed. No mechanism is found for the students with mental illness to study and complete the programme. Further, as the students expressed, there are barriers and limitations to the students for their interactive learning at the OUSL premises as in conventional learning. It is found that language barrier is a major setback especially for those who are not familiar with English language and face difficulty to interact freely with other students in the study programme. The mappings of assessments to course learning outcomes are found only in fashion design courses and not in others.

Criterion 6: Innovative and Healthy Practices

The review team observed that the Faculty of Engineering Technology has adopted several innovative and healthy practices which would lead to enhancement of quality of students' learning and development.

OUSL has a fully-fledged online LMS, and several courses are delivered through the LMS platform, which is learner friendly. In addition, other ICT based learning support systems are also available, for example, the library system. There are evidences of collaborating with relevant government and non-government institutions in carrying out undergraduate research projects.

Credit transfer is facilitated by granting exemptions for qualifications earned from various external institutions (there is a standard list of qualifications for which exemptions have been granted and also the facility to apply for exemptions for other qualifications). Fallback options are available for the students to exit at lower levels with Advanced Certificate in IS or Higher Diploma in IS. Further, final year research assists the students to develop basic skills in research, innovation and communication in undergraduates.

It is commendable for adopting income generating activities with diversified sources of income. Introduced short duration income generating activities like fee-levying programmes for external students, consultancy and advisory services. The faculty has introduced short-term income generating activities such as fee-levying programmes for external students, consultancy and advisory services. Further the University provides financial assistance as well as Temporary Residential Facility for needy students. FET promotes students and staff engagement in wide variety of co-curricular activities such as social, cultural and aesthetic activities.

OUSL has a well-equipped unique audio, video, filming, photography, recording, editing facilities from a technological laboratory with essential equipment (CETMe). In addition, it has a printing unit also.

Staff involvement in research is relatively less, though there are some evidence such as undergraduate research grant applications. Few faculty members are among research award recipients. In addition to the work load, staff members are to be motivated to engage with research published in high impact journals.

There is lack of innovative assessment methods for Open and Distance Learning. Links with local institutions are found in OUSL. However, there is no evidence of operationalized links with international partners during the review period. There is no evidence of issuing letters or facilitating outward credit transfer.

Further, Lack of evidence of student participation in outside competitions apart from Pro Food Pro Pack, which appears to be an internal one. Students did not demonstrate strong communication skills, possibly may be lack of participation in external events, competitions, etc.

No rewarding mechanism for encouraging and rewarding student participation at innovation/ sports/ general knowledge /IQ competition at regional and national level.

Section 6 - Grading of Overall performance

Table 6.1: Assessment Criteria and Score

No.	Criterion	Weighted Score	Weighted minimum score*	Actual criterion-wise score
1	Programme Management	150	75	141
2	Programme Design and Development	150	75	133
3	Course Design and Development	200	100	189
4	Learning infrastructure, resources and Learner support	300	150	295
5	Learner assessment and evaluation	150	75	143
6	Innovative initiatives and Good practices	50	25	48
	Total score	1000	500	948
	Total score (out of 100)			94.85

Final Grade: A (Very Good)

This Section reveals the overall score allocation of the standards of six Criteria and the Actual criterion-wise score is computed in the table as 94.85%. Therefore, as per the manual, the **final grade** is **A**, means **Very Good**.

Section 7: Commendations and Recommendations

Criterion 1: Programme Management

Commendations:

- OUSL has widespread administrative mechanisms to operate 9 regional centers and 18 study centers across the country engaging in Open and Distance Learning methodology. The regional centres are equipped with essential infrastructure facilities, except few which need further development.
- Students are selected for the programmes using clear criteria and the process of student selection are open and news media like local newspaper and websites informed. Students have significant flexibility in selection of subjects to complete their BIS Honours degree programme.
- Staff Development Centre plays a vital role in training the staff members and administrative staff who are appropriately trained, technically competent. There are sufficient cadre positions.
- FET Publishes Handbook/Prospectus of the study programme annually, with all essential information and directions. Students receive each copy of the Guidebook at the commencement of the programme. In addition, the student orientation programme covers most of the sections.
- It is noteworthy to report that students can enroll themselves and write examinations at any study centres facilitating them to minimize the travel and especially for a situation like compulsory isolation due to COVID.
- FQAC involves regular monitoring and reporting to faculty, in addition representation from three Regional centers to the FQAC meetings and participation of Director for Regional Educational Services are also supportive in strengthening QA activities. OUSL considers the vital role of administrative and non-academic staff in its operation and existence of QA cells for administrative divisions is much appreciated and unique existence among the University system.
- FET has mechanism through provision of Student Support Unit – the existence of academic counseling, mentoring, student counseling, psychological counseling are in satisfactory level and health care services are readily accessible to the students.
- OUSL supports special needs/differently able students whenever required. Comparatively a smaller number of differently able students are enrolled in these programmes.
- OUSL adopts policy for zero tolerance to ragging, adheres fully with institutional bylaws. The reported incidents are minimum after COVID.

- Student accessibility to library facilities, ICT facilities including accessibility to computer terminals are evident. These facilities are extended at the regional centres reviewed (Jaffna, Kandy and Matara).
- Availability of a well-established Management Information System which even diagnose the group credit requirements. The MIS and LMS are commonly as well as widely used networks that are inbuilt into the operation of the programmes.

Recommendations:

- It is noted that the linkages with all levels of stakeholders outside the faculty to carryout curriculum planning, implementation and review are minimum and it is recommended to establish a strong link with the potential stakeholders especially alumni for the curriculum revision, teaching, assessment, training and student support systems.
- Though the Regional centres are established well, their operational mechanisms need to be strengthened to ensure functional integration and equal educational quality for the programmes conducted at the main University and in all the regional/study centres.
- It is recommended to develop some of the Regional Centres, especially Matara Regional Centre, which needs further expansion to cater the needs of the students like in other regional centres. However, a mechanism has to be devised to connect all the Regional and Study Centers to disseminate the QA activities and the processes. Since Regional Centres also serve as delivery points, all the 9 regional centres need to be interlinked with the CQA for quality enhancement of OUSL.
- It is recommended to comply with the institutional policy to promote Gender equity and equality especially presence of students in a statutory body like faculty board. A policy on student engagement may help to guide the students to have gender balance when nominating two students for the faculty board.

Criterion 2: Programme Design and Development

Commendations:

- The BIS programme is consistent with the mission, goals, and objectives of the University and it best fits with the mission of the Faculty of Engineering Technology.
- BIS programme complies with SLQF especially in terms of volume of learning, level descriptors and qualification descriptors.
- BIS curriculum is enriched by incorporating vocational, professional, interdisciplinary, and multidisciplinary courses, thus emerged are unique programme of required combinations.
- BIS curriculum encouraged multidisciplinary approaches and it contained diverse courses to which the students can opt for.

- FET has graduate profile for this programme and is used as the basis to develop programme and learning outcomes.
- The ODL methodology mainly focus on student centered learning, learning methods, provision of appropriate learning materials.
- The BIS programme has a compulsory In-Plant Training Programme.
- OUSL has StART@OUSL programme, which is unique and supporting the students to fit into ODL Mode.
- The BIS study programme was approved by the FB, Senate and Council and its operation adopted the procedures established and are maintained in bylaws, rules and regulations
- The BIS programme uses self-learning materials especially designed for diversity of learners are self-explanatory, self-directed and meant for self-learning. These self-learning materials are pilot tested, carried out need assessment by a specialized team involved in content development, technical editing, proof read, edited, approved and published by the OUSL.

Recommendations:

- It was found that participatory approach in designing of the programme especially engaging non-academic and technical staff, alumni and external stakeholders is weak and potential stakeholders need to be invited for the review of the programme. Those evidence need to be catalogued for the perusal of the reviewers in the next cycle.
- The curriculum of BIS has to be reviewed periodically in consultation with wider stakeholders.
- FET needs to strengthen the industry-university relationship to enlist adequate number of relevant industries to utilise the existing training opportunities. Students have to be supported to find suitable industries for training be enlisted.
- FET needs to maximize the utility of IT into the programme to produce graduates with adequate and advanced IT applications when assigned to a job.

Criterion 3: Course Design and Development

Commendations

- The existence of unique well-developed Centre for educational Technology and Media studies (CETMe) ensures the quality of the written, audio and video course materials and the infrastructure facilities and technology available at CETMe for the development of audio and video course material are commendable.
- The course team approach to design, develop and deliver course materials by the content developers, instructional designers, graphic designers and content editors as well as language editors showcases an outstanding quality enhanced process.

Recommendations

- A mechanism is needed to ensure that all the courses designed are approved by the faculty and/or university level Quality Assurance Cell.
- It is better to perform a course review or evaluation at the end of every academic year or so, taking the feedback from stakeholders including the students. Appropriate revisions can be identified in such review, and they can be incorporated into the course designs to ensure continuous improvement.
- It is recommended to map the learning activities with the CLOs and also the assessment methods with the CLOs. This will ensure constructive alignment showing how each learning activity serves in achieving the CLOs and how the respective assessment methods evaluate the attainment of the CLOs.
- The faculty needs to develop appropriate mechanisms to establish linkages with national and international agencies for course design and development.

Criterion 4: Learning infrastructure, Resources, and Learner Support

Commendations

- OUSL particularly FET adopting time management is well appreciated. Credibility of timely operation of the programme, assessments and handling complaints and academic appeals.
- OUSL learning infrastructure is commendable except in few regional centres. Others esp. Kandy, Jaffna have new buildings and the facilities are adequate enough to provide the services to the students.
- FET has to establish sufficient and appropriate facilities to learners with special needs to support ODL, these are reflected in the long-term plans and budget.
- SDC action plans are commendable, and an effective human resource development system and FET has to explore such facilities to be used in postgraduate studies and research.
- The Library resource centre at the OUSL has adequate and up to date reference materials, in addition, the regional centers [Jaffna, Kandy and Matara] reviewed also have library facilities, SMART class rooms with necessary resources.
- The laboratories at FET have appropriate equipment and physical facilities for the Practical based courses. Those laboratories conduct practical classes and training continuously by grouping the students.
- OUSL provides adequate research facilities to the staff members to involve in research and are also extended to the students who carry out their final year research. Staff research are commendable with the work load of ODL mode. Staff members are honored with research awards. It is noted that Staff Research is rated as the strength of the OUSL in the U-Multirank assessment carried out.
- It is observed that user-friendly facilities are in existence including to those with special needs. This was also witnessed in the new buildings at the regional centers [Jaffna, Kandy

and Matara] reviewed having provision of lift and sloppy foot path for the differently able student's easy mobility.

- OUSL and FET, has appropriate and adequate a learner support system with a mechanism of regular evaluation (comprehensive, contact sessions, peer support, and academic and personal counseling) and targets retention and prevent learner dropouts under the purview of a designated Administrative Unit headed by a Director.
- FET has excellent quality programme delivery esp. print, audio-video CDs, videoconferencing, computer-based instruction, online learning based on the nature of learners, learning objectives. The additional facility at CETMe gives immense support to the ODL mode of delivery and a Director administers the Centre exhibiting its unique existence.
- It is learnt that Instructors are given orientation, necessary training, and support to distance education. This maintains the quality performance of the staff members directly in contact with the students.
- FET provides academic and career counseling using their qualified staff.
- OUSL and FET in particular has provision of inclusive educational environment for learning resource centers of 9 regional Centres, 18 study Centers, for academic/student counseling and monitoring, Learner support, Career guidance and Gender equity and equality. The green policy of OUSL supports nature driven environment with a charming outlook.
- It is found that a grievance and redress mechanism is in existence with the support of a Grievance Redress policy and defined memberships with TORs.
- FET monitors completion/graduate rate, employment rate regularly and remedial measures are taken.
- Policy on Gender equity and equality is in existence giving equal rights to the gender.

Recommendations:

- FET departments need to include newer machines in demonstrations for Practical based courses such as Textile Production, Agricultural Machineries sections have old machines for demonstration, though meant for explaining the fundamental, however need to procure new machines with advance technologies.
- FET needs to establish a policy to include selection and effective use of latest and appropriate electronic devices and provision of internal and external networks.
- The observed lack of training to the technical staff members and lab attendants especially on recent advancement technologies, and about quality enhancement system in the University to be rectified.
- FET need to establish a pre-Counseling system to facilitate needy and competent students who can take up the challenge of self-learning.
- FET has a weak mechanism to address the regular student queries through hybrid mode. This to be addressed.
- The lift is not in operation for a long period at the Natural Science building where most of the departments located. The labs of Agricultural and Plantation Management situated in

third floor and Deans office in second floor. This has led to difficulty to the staff members as well as to students with special needs to access these departments and labs.

- FET lacks a policy for active learner participation in areas that affect the welfare of students such as peer counselling, co-curricular activities as well as community engagement.
- It is noted that there is no provision for psychological counseling, and it has to be met with the institutional support by appointing professional counselors.
- FET collaborates with the industries for the industrial training. However this has to be evaluated and strengthened especially for the career-based learning experiences.
- The faculty has an Alumni Association, and their networking can be further strengthened by engaging them in the curriculum revision, especially to fix the students in industrial training, further there is no alumni association at University level.

Criterion 5: Learner Assessment and Evaluation

Commendations:

- Assessment strategies of student learning are in operation of an integral part of the programme design and are amended periodically.
- Existence of student assessment policies, regulations, and processes with reference to SLQF. Formative and summative assessments are as appropriate and are integrated into teaching and learning strategies. Formative assessments are done and the feedback from students obtained.
- Mechanism of ensuring reliability and fairness of assessment methods existing and independent external scrutiny to evaluate and improve the management of student assessment is also found.
- Maintaining confidentiality of the assessment documents and records are ensured, and has approved procedures for designing, setting, moderating, marking, grading, monitoring, and reviewing the assessment methods and awards in a systematic manner.
- Regular training and discussions are found for the methods of assessments to staff and students and evaluating the physical fitness to undertake their roles and responsibilities.
- FET adopted well defined marking scale, marking scheme, internal marking, and procedures for recording and clearly communicated to students.
- FET has clear policy on external/second examiners, their assessment and maintenance, Existence of Examination (assessment) policies and procedures provide differently abled students with the same opportunity as their peers to achieve learning outcomes.
- Existence of broad-based assessment has diversity in conducting formative and summative examinations including day-schools, industrial training, field-based training, and clinical training.

Recommendations:

- Only the mapping of assessments to course learning outcomes is evident on fashion design courses and introduced to others too.
- Inadequate mechanism for differently abled students to facilitate them to be rectified to be on par with others, although facilities are available for their easy mobility.
- No mechanism for the students having mental illness to study and complete the programme and an appropriate mechanism to be introduced.
- Barrier/limitations to the students for their interactive learning at the University premises to be rectified.
- Language barrier especially those could not be familiar with English language face difficulties to be with the other students in the study programme. Remedial measures to be initiated.

Criterion 6: Innovative and Healthy Practices**Commendations:**

- OUSL implements fully-fledged online LMS together with other ICT based learning support systems are commendable. The commitment of the technical staff to continuously improve these systems by expanding their functions is also appreciated.
- Commendable effort has been made to facilitate credit transfer by granting exemptions for qualifications earned from various external institutions.
- The fallback options available for the students to exit at lower levels with Advanced Certificate in Industrial Studies or Higher Diploma in Industrial Studies are commendable.
- Commendable progress has been achieved in adopting short-term income-generating activities such as fee-levying programmes for external students, consultancy, and advisory services in order to diversify the sources of income.
- Social interaction of students with staff is minimal and need to be strengthened by incorporating innovative programmes.

Recommendations:

- Faculty members should be facilitated and encouraged to involve in research, supervision of post-graduate research, applying for external research grants, and collaborate with research partners in other institutions both locally and internationally.
- It is recommended to publish both student and staff research in reputed indexed journals.
- Just like the OUSL accepts credit transfer from other institutions, it can arrange agreements with other academic institutions to grant exemptions for the courses completed (credits earned) from OUSL.

- It is recommended to facilitate and support interactive events and competitions such as debating competitions, research showcases, and mock interviews with potential employers, etc. to develop the communication skills of the students.
- Some rewarding mechanism is needed to encourage and reward student participation at innovation/sports/general knowledge /IQ competition at regional and national level
- It is recommended to try new and more innovative assessment methods for ODL mode.
- Introducing rewarding system to appreciate/honour the best served non academics in the University/faculty/department

Section 8: Summary

The Bachelor of Industrial Studies Honours degree programme is being reviewed based on the SER submitted by the Faculty of Engineering Technology. Since the programme is conducted in Open and Distance Methodology, the review was conducted based on the Manual developed for Open and Distance Education. The SER was carefully arranged criteria by criteria listing all the claims with respect to each standard together with the evidences of compliance. The documentary evidences were properly and methodically listed in the SER. While the soft copies of the documents were uploaded to CQA online platform, the hard copies were available for physical verification during the site visit. The review team reviewed the documents online before the site visit and also made a physical verification of some documents during the site visit.

Most of the evidences provided are matching with the requirements of the standards, and hence it shows the BIS honours degree programme is conducted as per the regulations stipulated in SLQF. The content development team approach is unique and a best practice for the preparation of study materials in printed and electronic forms. The teams pass through many steps ensuring the quality of the learning materials.

The review team observed ample evidences of proper quality assurance pertaining to all the criteria and experience and entertains remarkable unique good practices. The team highly appreciates the commitment of staff in synchronizing the degree programme across the regional centers. Simultaneous conductance of the teaching and examinations at regional centers with limited staff is commendable.

The OUSL in general and the Faculty of Engineering Technology in particular, are well accustomed to the fact that preparation of teaching and learning material is a key to the success of remote and distance learning. Well established policies and procedure are available to ensure the quality of both printed and audio-visual course material. The service provided by CETMe in this regard is outstanding.

A few shortcomings were identified in the review and some recommendations for further improvement are given in section 7. The review team expects that the faculty would take those recommendations constructively as peer suggestions to further improve the quality of the degree programme.

Thus, the Bachelor of Industrial Studies (Honours) degree programme has earned an “A” grade with an overall score of 94.85% which means that the study programme is at an excellent level of accomplishment. The review team wishes to congratulate all the staff of the Faculty of Engineering Technology for their achievements in maintaining high quality and standards in the study programme.

The team acknowledges the Vice Chancellor of the Open University of Sri Lanka, Dean of the Faculty of Engineering Technology, the Heads of the Departments, Chair of SER writing team and the SER Team members, Directors of the Centres with the special mention to the Coordinator of FQAC–FET, who arranged the Stakeholder meetings, site visit and logistics and all the staff for their excellent support and facilitation throughout review process.

Annexure: Site visit schedule

Site Visit

**Faculty of Engineering Technology
Open University of Sri Lanka
Bachelor of Industrial Studies (Honours)**

10.03.2023-Friday

	Time	Meetings	Remarks
1	8.00 - 8.45	Meeting with the Vice Chancellor	VC office
2	8.45 - 9.15	Meeting with Dean, Director/CQA and Coordinator/FQAC	Visit to FQAU
3	9.15-10.00	Meeting with Administrative Staff, Technical Officers and Academic Support Staff of the Faculty	
4	10.00 -10.15	Refreshments	With the Dean
5	10.00-11.00	Meeting with Students (Gender balance is needed)	
6	11.00-11.45	Visiting the Library and Meeting with Library Staff, Visiting Center of Educational Technology and Media (CETMe) Recording Rooms, Meeting with Staff Visiting OUSL Press – Observation of Facilities	Visit to Library and CETMe Facilities-Audio Visual Labs, OUSL Press
7	11.45-12.45	Visiting Teaching/Learning Facilities, Departmental Teaching Labs, Research Labs, Lecture Halls and Smart Lecture Theaters, Industrial Liaison Centre.	Research Labs and other facilities
8	12.45-1.30	Lunch	
9	1.30-2.15	Meeting with the Student Welfare Division	Visit to Welfare Section, Visit to ELT and IT Unit
10	2.30-3.30	Discussion of Review Panel members	
11	3.30-4.30	Wrap up meeting with the Dean, Heads, all Academic Staff, and DR/SAR/AR of the Faculty	