Hung Yen, 25 January 2024

DETAILED SCHEME

IMPLEMENTING THE COLLABORATION IN EDUCATION WITH A FOREIGN PARTNER AT BACHELOR LEVEL BETWEEN BRITISH UNIVERSITY VIETNAM AND UNIVERSITY OF STIRLING

I. THE NECESSITY TO OPEN THE PROGRAMME

1. Suitability for local, regional and national human resource development needs

The rapid advancement of technology and the digital economy has led to an increasing demand for professionals skilled in Data Science and Artificial Intelligence (AI). Recognizing this trend, the establishment of this proposed new programme can be justified from several perspectives.

The Vietnamese government has acknowledged the significance of AI and data science for national development. In 2021, the master plan to foster the AI industry in Vietnam was unveiled. This strategy, known as the 'National Strategy on R&D and Application of Artificial Intelligence,' outlines Vietnam's plan to cultivate AI until 2030. The introduction of this programme fully aligns with this national strategy.

This strategy aligns with the growing demand for AI and data science professionals in Vietnam. This demand is projected to rise in the future, as AI and data science are integral to the growth of economies worldwide.

Between 2015 and 2019, Vietnam invested less than a dollar per capita in AI. However, in 2021, total investment in artificial intelligence reached \$77.5 billion. There are over 60 AI companies in Vietnam, and as of 2021, there were 2,059 research publications on AI in the country. These statistics underscore the growing importance and development of AI and Data Science in Vietnam.

Al and data science are expected to significantly contribute to economic growth. By training more professionals in these fields, Vietnam can leverage these technologies to stimulate economic development.



In conclusion, the establishment of this new programme in Data Science and AI is justified from the perspectives of national development strategy alignment, increasing demand, human resource development, regional development promotion, and economic growth stimulation. It represents a strategic move towards realizing Vietnam's vision of becoming a modern and industrial nation by 2035.

2. Suitability for the human resource needs for industries

The suitability of a new university program in Data Science and Artificial Intelligence (AI) for the human resource needs in the related industry in Vietnam can be justified as follows:

• Addressing Talent Shortage

The tech startup industry in Vietnam, including AI and data science, faces challenges due to a restricted local talent pool. This programme can help address this talent shortage by producing skilled graduates in these fields.

• Meeting Industry Demand

The integration of AI in human resources will facilitate the analysis, prediction, and diagnosis of the issues faced by organizations and help to make better employee-related decisions. These are shortage in Vietnam and skills in high demand, not just in Vietnam but also worldwide as shown by the statistics quoted above.

• Promoting AI Development

According to a 2019 report by the Ministry of Information and Communication, Vietnam has over 30,000 ICT enterprises of various sizes, roughly 955,000 IT workers, and over 80,000 university and college graduates with majors in information and communications technology. However, AI experts are in short supply. The new programme addresses this need directly.

• Boosting Economic Growth

On its current trajectory, artificial technology is expected to contribute 12% to Vietnam's GDP by 2030. By producing professionals skilled in AI and data science, BUV aligns with both his mission and national strategy, providing key resources to a growing and crucial industry.

In conclusion, the new programme in Data Science and AI is suitable for the human resource needs in the related industry in Vietnam. It can help address the talent shortage, meet industry demand, promote AI development, and boost economic growth.



3. Suitability for the university's missions & development strategy

BUV's mission is to develop highly employable graduates who are first and foremost good human beings with an ethic of kindness and caring. Graduates will also be cross-disciplinary in skills and language; innovative, imaginative, respectfully confident; and committed to continuous learning and development. BUV expects all its staff, students, and stakeholders to be courteous and care about the wellbeing of other people; to respect their environment; and be socially and culturally inclusive.

In short, BUV is committed to the bilateral relations between Vietnam and the UK and will continue to turn young Vietnamese students into talented and respectful adults that are confident and caring, but most importantly they are prepared to lead the way and thrive in a challenging and exciting future in which the jobs and roles they will play are yet to be invented.

In specific, the Data Science and Artificial Intelligence programme aligns with the mission and values of British University Vietnam (BUV) in several ways:

- Developing Highly Employable Graduates Data Science and AI are among the fastest-growing fields in the world today. By offering a program in these areas, BUV is preparing its students for high-demand roles that will increase their employability.
- Cross-Disciplinary Skills Data Science and AI require a combination of skills from different disciplines, including mathematics, computer science, and business. This aligns with BUV's mission to create graduates who are cross-disciplinary in skills.
- Innovation and Imagination The field of AI is all about creating new algorithms and models to solve complex problems. This requires a high degree of innovation and imagination, which are key values at BUV.
- Continuous Learning and Development The field of AI is constantly evolving with new technologies and methodologies. This aligns with BUV's commitment to continuous learning and development.
- Ethics of Kindness and Caring As AI technologies become more prevalent, there is a growing need for professionals who can navigate the ethical implications of these technologies. BUV's emphasis on ethics of kindness and caring can guide students in making ethical decisions in their AI practice.



In terms of strategy, a programme in Data Science and Artificial Intelligence aligns with the strategic goals of British University Vietnam (BUV) in the following ways.

- It meets market demand as there is a growing demand for professionals skilled in Data Science and AI. By offering a program in these areas, BUV is strategically positioning itself to meet this market demand and attract a broad range of students. It fosters innovation and technological advancement. The field of AI is at the forefront of technological innovation. By incorporating this into their curriculum, BUV is demonstrating a commitment to staying at the cutting edge of technology, which is a strong strategic move in today's rapidly evolving educational landscape.
- It encourages an interdisciplinary approach. Data Science and AI are inherently interdisciplinary, combining elements of computer science, statistics, and business. This aligns with BUV's strategic focus on providing an interdisciplinary education.
- It promotes ethical leadership. With the rise of AI, there are many ethical considerations that have come into play. BUV's emphasis on ethics in their mission statement can be incorporated into the AI program, training students to be not just technical experts, but also ethical leaders in the field.
- Lastly, it has global relevance. Al is a field with global relevance, and expertise in this area can open up international opportunities for students.

Sources:

- Vietnam's Tech Startups: Human Resource Challenges. <u>https://www.vietnam-briefing.com/news/vietnams-tech-startups-human-resource-challenges.html/</u>.
- The Future of Artificial Intelligence in Vietnam: An overview. <u>https://innovatureinc.com/the-future-of-artificial-intelligence-in-vietnam/</u>.
- HR Analytics and Artificial Intelligence-Transforming Human Resource <u>https://ieeexplore.ieee.org/document/9682325</u>.
- Artificial Intelligence in Vietnam: A Tool For Development. <u>https://borgenproject.org/artificial-intelligence-in-vietnam/.</u>

II. INTRODUCTION OF PARTICIPATING PARTIES

1. Overview of participating parties' background.

British University Vietnam was established in accordance with Decision No. 1428/QD-TTg dated 09 September 2009. Since its establishment, British University Vietnam has been implementing the



educational philosophy and method of the UK education system, while ensuring the training programmes are appropriate for Vietnamese students.

All training programmes are provided by internationally qualified faculties, along with academic support for students towards the purpose of personal and professional development for students.

The University of Stirling, Scotland's youngest university, is granted by Royal Charter in 1967. It is located in the Central Belt of Scotland, built within the walled Airthrey Castle estate. With a cohort of almost 14,000 as of 2022, students make up over a quarter of the total population of Stirling. International students number around 20 percent of the whole and represent more than 120 nationalities between them.

Considered one of Scotland's leading universities for sport, Stirling has strong sporting alumni associated with it, including professional golfer Gordon Sherry and Olympic swimmer Todd Cooper and has a number of excellent sporting facilities. It also ranks among the top research-intensive universities in the UK with strengths in the fields of health and wellbeing, the environment and people, culture and society, enterprise and the economy, as well as sport.

As part of the QS Stars University Ratings 2021, the University of Stirling was awarded 5 stars in the areas of teaching and employability. UoS is ranked top 10 in the UK for good teachers and expert lectures (International Student Barometer 2022).

2. Collaboration process between the parties.

The collaboration between British University Vietnam and University of Stirling presents opportunities to be exposed to advanced and long-established UK higher education degree programmes of international quality and direct employment relevance for Vietnamese students and international students learning in Vietnam. The benefits to be gained from this collaboration encompass the vision and strategic objectives of British University Vietnam as part of a determined effort to meet the twin demands of academic quality and contemporary studies in Vietnam, and it thus complements the clearly stated wishes of the Government of Vietnam to both upgrade and to internationally benchmark the quality standards within Vietnamese universities.

The inauguration of British University Vietnam as the first British University to be opened in Vietnam is an important and complementary part of the spectrum of engagement between Vietnamese and UK



Higher Education. This was reviewed between Former Deputy Prime Minister Nguyen Thien Nhan; Minister of Education and Training Pham Vu Luan, with the Former British Ambassador Mark Kent and British Council Director Robin Rickard on the 15th of April 2010 meeting.

In addition, COVID-19 has illustrated the demand and need for provision of international programmes taught in Vietnam with travel difficulties as well as reticence to learn in the country where the pandemic has been controlled.

Based on the values of the collaboration between British University Vietnam and University of Stirling being offered to all its students, the continuing collaboration of the Data Science and Artificial Intelligence programme will offer significant benefits to students and has the following general aims:

- An international perspective to understand the global data science field.
- Creative problem-solving skills to find the best applications for the technology and skills they have.
- An ability to communicate complex technical ideas from both computing and data science to audiences with varied backgrounds. You will need to be able to tell stories about customers, systems, data and business in a coherent way.
- Confidence working with new technologies and in challenging business environments.
- An appreciation of the sensitivities and security requirements around the use of personal data in the with particular emphasis on the implications of new technology being introduced in those sectors.
- A willingness to embrace new ideas and win over people whose views are different.
- A strong ethical grasp of the issues around privacy, security and automated decision making.

3. Accreditation of participating parties

Both British University Vietnam and University of Stirling are legally established and accredited.

University of Stirling

The University of Stirling is an international university committed to helping students make a difference in the world. Based in the heart of Scotland, Stirling is a place where ability — not background — is valued, and teaching, employability and facilities are all rated five-star (QS Stars University Ratings 2021).



The University of Stirling is ranked top 40 in the UK (Times and Sunday Times Good University Guide 2023), top 20 in the UK for postgraduate teaching (Postgraduate Taught Experience Survey 2022) and students rated us top 20 in the UK for student satisfaction in the National Student Survey 2022.

With more than 170 undergraduate course combinations and over 90 postgraduate courses, including a portfolio of online courses, UoS equips their graduates with the knowledge, expertise and employability skills needed to succeed in the workplace.

UoS holds multiple industry accreditations, including:

- Association of Chartered Certified Accountants (ACCA)
- BCS, the Chartered Institute for IT
- British Psychological Society (BPS)
- Chartered Institute of Management Accountants (CIMA)
- Chartered Institute of Marketing (CIM)
- Chartered Institute of Public Finance and Accountancy (CIPFA)
- General Teaching Council for Scotland (GTCS)
- Institute of Chartered Accountants in Scotland (ICAS)
- Institute of Mathematics and its Applications (IMA)
- Institution of Environmental Sciences (IES)
- Scottish Social Services Council (SSSC)

British University Vietnam

Following our success in securing the internationally recognised QS 5-star quality rating in 2022, BUV has been quality reviewed during 17- 19 October 2022 before being granted with university-wide accreditation from the Higher Education Quality Assurance Agency (QAA) for period 12/12/2022 – 11/12/2027.

The British University Vietnam (BUV) has become the first university in Vietnam to be awarded global quality accreditation by QAA after successfully completing its International Quality Review (IQR). IQR is a rigorous process which benchmarks global higher education institutions against international quality assurance standards set out in Part 1 of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).



The review was performed between 17 and 19 October 2022 by three independent reviewers appointed by QAA who found that BUV had met all the 10 ESG Standards and Guidelines. As part of the review, QAA identified the following areas of good practice at BUV:

- Significant employer engagement and connections with civic society are actively facilitated by all internal stakeholders, including students. It is fundamental to enabling BUV to deliver its mission.
- Opportunities and support for students in preparing for, identifying, and participating in work placements and internships, as formal components of programmes and as extracurricular activities, greatly enhances job readiness and employability.
- Certified and comprehensive Personal Development Programme of activities and modules that enhance students' broader knowledge and personal development, help to define graduate attributes.

BUV has now set new records in Vietnam and the international education sector including:

- The first and only university in Vietnam awarded QAA university-wide accreditation.
- Being one of only 22 universities outside the UK to achieve QAA university-wide accreditation.
- The first university in the ASEAN region to be granted QAA university-wide accreditation.

Sharing his appraisal and congratulations with BUV, Mr. Chris Bland, QAA's Head of Accreditation and Consultancy, said: 'It is with great pleasure we announce that the British University Vietnam has successfully completed our International Quality Review. It is to their credit that they become the first university in Vietnam to achieve this recognition. I hope this is the beginning of a deep relationship with BUV and that we can work together on other activities.' BUV's IQR accreditation will be valid for five years and subject to a satisfactory mid-cycle review in 2025.

In addition, training programmes will be reviewed, assessed, and revised regularly to make timely amendments and improvements. We will ensure that the assessment and appraisal of the training programme align with both the regulations of the Ministry of Education (as per Circular 17/2021/TT-BGDĐT) and the BUV Academic Monitoring Policy and Procedure (accredited by QAA on 08 February 2023). The academic monitoring process used in BUV includes Module Monitoring Reports (MMRs), Programme Monitoring Reports (PMRs), and Annual Monitoring Reports (AMRs), linked together with School level Academic Action Plans (AAPs). This process operates in addition to the usual practices



regarding the rapid resolution of any identified operational teaching matters so that the student experience is not impacted.

III. CONTENTS

1. Objectives: Provide brief information about programme outcomes.

The BSc (Hons) Data Science & Artificial Intelligence will give you an in-depth awareness and appreciation of the underlying computing and mathematical principles driving data science technologies. It is a practical degree focusing on the mathematical and analytical skills needed to begin a career as a data scientist or analyst.

Connected

- 1. The programme will teach you to communicate complex technical ideas to audiences with varied backgrounds. You will need to be able to present about customers, systems, and data and business in a coherent way.
- 2. The programme will allow you to develop a strong ethical grasp of the issues around privacy and security.
- 3. The programme will connect you with private, public and third sector representatives via external teaching contributions, placement opportunities and employer-engagement events.
- 4. The programme will connect you with knowledge, experiences and people providing different perspectives on cultures, beliefs and traditions within the computing context, via diverse student and staff population, placement opportunities, and examples embedded in our teaching.
- 5. The programme will allow you to work with staff, students and external organisations as part of an inclusive learning community.
- 6. The programme will teach you to communicate effectively through a range of digital and other media.

Innovative

- 1. The programme will teach you creative problem-solving skills to find the most suitable solution.
- 2. The programme will train you in independent critical and reflective thinking around computing science and in particular data science problems.
- 3. The programme will teach you to identify opportunities for improvement in your own learning and to take action.

Transformative



- 1. The programme will provide you with a deep appreciation of the sensitivities and security requirements around the use of computer systems for data manipulation and analysis. You will be able to apply that understanding when developing new technology and processes.
- 2. The programme can transform your intellectual passion and excellence with regards to data science problems and solutions.
- 3. The programme can help you share new perspectives and broaden your horizons via industrial placements as well as in-class discussions.
- 4. The programme provides training in professionalism, allowing you to develop as an adaptable and resilient computer scientist, equipped to succeed in the global computing jobs market.
- 5. The programme allows you to develop as an active global citizen who is socially, culturally and technologically aware.

2. Recruitment subjects and recruitment scale.

Recruitment subjects:

- o Vietnamese citizens who have graduated from high school or equivalent; or
- Foreign citizens who have graduated from high school or equivalent.

Recruitment scale

Year 1: 25 students Year 2: 35 students Year 3: 60 students Year 4: 60 students Year 5: 60 students

3. Duration and training programme: Specify training duration, form and implementation method of the collaborative programme.

- Duration: 3-year training period divided into six semesters. The programme is provided by University of Stirling, 360 UK credits.
- Form: The training form is full time and on campus.
- Implementation method: Year-based training
 - Year-based training is a method for training organization where all mandatory units of study of the training program are organized into relatively fixed classes, allowing students of the same class to follow the standard learning plan and a common schedule, except for elective or retaken units of study;



Programme structure

Year 2

Total year 2 credit value = 120

Compulsory credits = 120

Module Name	Module Code	Credit	Semester	SCQF Level
Introduction to Computing	CSCU9P1	20	Autumn	7
Science				
Discrete Structures	MATU9S1	20	Autumn	7
Scripting for Data Science	CSCU9M3	20	Autumn	8
Programming and User	CSCU9P2	20	Spring	7
Interface Design				
Introduction to Data Science	CSCU9S2	20	Spring	7
Practical Statistics	MATU9D2	20	Spring	8

Year 3

Total year 3 credit value = 120

Compulsory credits = 120

Module Name	Module Code	Credit	Semester	SCQF Level							
Database Principles and	CSCU9B3	20	Autumn	8							
Applications											
Introduction to Machine	CSCU9M5	20	Autumn	9							
Learning											
UX Design	CSCU9X5	20	Autumn	9							
NoSQL Databases and Data	CSCU9B4	20	Spring	9							
Warehousing											
Natural Language Processing	CSCU9M6	20	Spring	10							
and Computer Vision											
Data Strategy	CSCU9D6	20	Spring	10							

Year 4

Total year 4 credit value = 120 Compulsory credits = 60

Option credits = 60



Compulsory Modules

Module Name	e		Module Code	Credit	Semester	SCQF Level
Computing Science Project			CSCU9Z7	60	Autumn + Spring	10
Data Science Applications			CSCU9DA	20	Autumn	10
Distributed	Data	Science	CSCU9DC	20	Spring	10
Systems						

Option Modules

Module Name	Module Code	Credit	Semester	SCQF Level	
Computer Security	CSCU9YX	10	Autumn	10	
Artificial Intelligence	CSCU9YE	10	Autumn	10	

CSCU9Z7 is split so that students take 20 credits in the Autumn and 40 credits in the Spring.

4. Recruitment conditions

Recruitment conditions:

- Vietnamese citizens: Meet English grade of IELTS 6.0 (no skill below 5.5) or the entry requirements of the Collaboration Programme;
- Foreign citizens: meet English grade of IELTS 6.0 (no skill below 5.5) or the entry requirements of the Collaboration Programme and the regulations on foreigners studying in Vietnam issued by the Ministry of Education and Training.

The Admissions Office will be in charge of checking and collecting all the applications to ensure that all the entry requirements laid down by University of Stirling are seen to be met and are closely adhered to.

After that, all the applications will be sent to University of Stirling for registration. Once all the applications are proved to be true and correct, University of Stirling will cooperate with British University Vietnam in carrying out other necessary procedures.

Students will be given an official Offer Letter (either Conditional or Unconditional). If the student decides to attend the course, he or she must sign the Acceptance Letter and return it to the Admissions Office of British University Vietnam.



5. Teaching language: English

- **6. Degree Certificate to be issued:** Bachelor of Science (Honours) in Data Science and Artificial Intelligence issued by University of Stirling.
- 7. Activities involved in the collaborative programme: Lecturing, examination, test, graduation, coordination in lecturing between Vietnamese lecturers and foreign lecturers, etc.

Learning and Teaching

Recognising the diverse skills and styles of our students' community places an emphasis on ensuring that a range of learning environments and media are available and enabling students to engage in learning in a variety of ways. The emphasis on practice-based learning in a professional environment creates the need for additional learning environments such as taking responsibility for hosting student's own events and learning by doing to supplement the more traditional approaches of lectures, guest speakers, tutorials, workshops, seminars and VLE to complement and enhance traditional, face-to-face learning experience. Knowledge and skills will be developed through case-studies, role-plays, simulations, presentations, projects (work-based and academic), reflective portfolios and the extended use of technology supported activities.

The curriculum will develop and evolve so that knowledge and skills learned in modules will be transferred, re-applied and developed in related modules at higher levels. Students will be guided through student's studies through a teaching support network of module tutors, personal tutors, award leaders and supporting academic and managers, and dedicated and involved support and pastoral staff. Learning and teaching will be an enriching experience for students that reflects the value the school places on effective, innovative and research informed teaching. Learning and teaching will foster student's critical intellectual development and the business capabilities required to engage in contemporary organisations.

In student's learning situations students will be acting in partnership with module deliverers and facilitators who, through a programme of study designed to develop an evolving body of knowledge and portfolio of skills will be:

- Encouraging active learning and a confidence to learn
- Making explicit the skills to be developed through the curriculum
- Stimulating intellectual curiosity and excitement in learning through engagement with up to-date and contemporary, well researched subjects.



- Encouraging critical reasoning about the world of business to achieve well informed judgements and conclusions
- Challenging and shaping new learning experiences and opportunities through application of research informed pedagogy

And students will be:

- Engaging with complex, challenging problems and real-world issues
- Proactively using available resources, technical, digital and paper-based to address problems, construct solutions and identify new topics for research.
- Engaging in constructive reflection on learning and new ideas
- Communicating and sharing with others in effective teams and collaborative activities, demonstrating a sense of community through active involvement with individuals and groups from differing backgrounds, communities and value systems

Practice Based Learning

Practice Based Learning is based on students experiencing the learning curve through applying student's knowledge by running and hosting events in conjunction with a range of stakeholders.

Teaching and Learning Methods

Students will experience a variety of teaching and learning methods which incorporate both formal types of teaching and independent learning.

Examples of the types of learning experiences that students will encounter on the Events awards include:

- Lectures
- Tutorials and seminars
- Group tasks
- Students-led and tutor-led independent exercises
- Workshops
- Examinations
- Assignments
- Case based assignments
- Presentations
- Investigations



• Literature review

The start of each module students will be given a Module handbook. This should contain further details about the specific teaching and learning methods employed advice on how to manage student's own learning and how students will be assessed. Each module has a specified module leader all module-related enquiries should be directed to the module leader in the first instance.

All University of Stirling assessments are set and marked by academic staff appointed by the University and required to apply the University's academic standards. Examinations are hosted and invigilated by appropriate external organisations which are subject to independent audit. Double marking systems are in place for all assessment. External Examiners from other UK universities confirm high academic standards.

Assessment

Aside from a few exceptions, each full course is examined by one three-hour unseen written examination and each half course by one two-hour unseen written examination. The assessment of some courses also involves the submission of coursework or a project – in these cases, details are included as part of the course syllabus.

The written examinations take place on one occasion each year, normally commencing in May. These are held at established examination centres worldwide.

Assessment types

Written examinations form the greater part of the assessment of the programmes. For each course students will be assessed mainly by written examination. Questions are structured to allow students to demonstrate that they have acquired appropriate knowledge and understanding. The way that students manage data, solve problems, evaluate ideas and the organisational skills they use to structure their written answers allows the standard of intellectual and transferable skills to be assessed.

Assessment criteria for the programme take into account the level at which these skills have been achieved.

8. Sample graduation certificate (if any) to be conferred, similarity/equality between foreign qualifications and domestic ones issued by other educational institutions in the Vietnam's



national education system and capability of collaborative programme graduate's taking higher-level training programs.

Students fully meeting the graduation requirements will be awarded with Bachelor of Science (Honours) in Data Science and Artificial Intelligence issued by University of Stirling.

The degree is equivalent with Level 6 in the Vietnamese Qualifications Framework, regulated in Decision 1982/QD-TTg dated 18 October 2016.



9. Implementation plan/roadmap.



The programme will cover 360 credits, which once acquired, will enable the students to be eligible for graduation and awarded the same University of Stirling degree as students who have studied at University of Stirling in the UK.

The programme is implemented following the new adoption of an academic calendar model, known as the Two Plus One (2+1) Model, to enhance the learning experience for students. This model consists of two main semesters and one summer semester, each with a specific structure and duration.

Semester Structure:

Each 15-week semester includes the following:

- 1 week of Orientation or Re-orientation at the start of each semester: This week is dedicated to welcoming new students, providing an overview of the semester, and ensuring that students have the necessary resources and support.
- 12 weeks of Teaching: The majority of the semester is dedicated to teaching and learning. Courses are scheduled to allow sufficient time for students to complete coursework, participate in discussions, and prepare for assessments.
- 2 weeks of Marking and Moderation: At the end of each semester, a two-week period is allocated for marking and moderation of assessments. This ensures that grades are finalized and submitted on time, without overflowing into the following semester.

Benefits of the New Calendar Model:

The 2+1 academic calendar model offers several advantages:

• Improved Alignment with Partner Universities: The new calendar model aligns with the academic calendars of partner universities in the UK, facilitating student exchanges and transfers. This enhances opportunities for international collaboration and provides a seamless transition for students seeking further education abroad.

• Reduced Stress and Workload: By eliminating the overrun of marking and moderation into the following semester, the new model reduces stress and workload for teachers and administration staff. This allows for a more manageable and balanced academic schedule.

• Continuous Learning: The new model eliminates the start/stop process of learning experienced in the current semester structure. Students can now engage in continuous learning throughout the academic year, fostering a deeper understanding of the subject matter.



Implementation Timeline:

The new academic calendar model will be implemented from Autumn Semester 2024. Whereas teaching blocks 1 and 2 of each year shall be implemented consecutively in two main semesters, after which, students will have a PSG semester for internship and PSG programmes. Specifically for F&E programme and other BUW own programmes, students shall have their Vietnamese modules (National Defense, Physical Education and 05 compulsory political theory models) arranged within the PSG semester.

Communication and Training:

A comprehensive communication and training plan will be developed to inform students, faculty, and staff about the new academic calendar model. This will include town hall meetings, workshops, and online resources to ensure a smooth transition to the new model.

Evaluation and Feedback:

The implementation of the new academic calendar model will be closely monitored and evaluated. Feedback from students, faculty, and staff will be gathered regularly to assess the effectiveness of the model and make necessary adjustments.

10. Facilities and equipment necessary for the collaborative programme and teaching location/venue.

Facilities and equipment

Infrastructure and facilities: The area of Campus in Ecopark is 6,5ha. The timeline for construction of the new Campus consists of 3 phases: Phase 1-2,84ha and Phase 2 and 3 – 3,66ha. Phase 1 was completed and the current facilities in Ecopark Campus includes:

Order	Category	Number	Total area (m2)
1	Library	01	1.230,1
2	Classrooms	23	1.947,5
3	Lecture hall	02	851,4
4	Teacher office	02	258,5
5	Research area	06	490,4
6	Sport area	03	654,7
7	Canteen	02	4,096



Order	Category	Number	Total area (m2)
8	Others		4.887,8
Total			14.416,4

The library building is designed in a contemporary style, which includes Library area, 24-hour study area, specialised discussion rooms for students and computer access.

Classrooms: 23 classrooms with open design and flexible to serve various needs. These rooms can accommodate 30-45 students and are fully equipped with modern teaching auxiliaries, projectors, LCD screens, high-quality audio system, air conditioning, and a standard light system.

02 large lecture halls: with an average area of 425 m2 accommodating 250 students per lecture hall, 6m high, equipped with smart board, projector, LCD screen, high quality sound system, air conditioning, system Standard lighting system. In addition, large lecture halls also have an online system that allows students to sit anywhere in or outside the Ecopark Campus to participate in interactive lectures through online tools.

The construction of the BUV campus Phase 2 at Ecopark started in August 2022, with an investment of 33 million USD, and is expected to be completed in early 2025.

Specifically, BUV invested in building a new canteen with a total floor area of 4,096m2, a sports complex including basketball and badminton courts, and a new academic building. The indoor and outdoor spaces are arranged in harmony in an open, green landscape. The iconic minimalist and liberal architectural style indicative of 4IR reflects the educational approach at BUV.

All of the spaces at BUV are designed for Higher education level students. Our Learning Studio, Learning Cluster, X-space, Theater Pod & Halls were designed for the delivery of lectures. BUV also has functional classrooms that customised for the delivery of our specific higher education programmes. This includes, for example, Art Studio & Photo Studio; Learning kitchen, Restaurant, Front Office & Housekeeping; Digital Lab, Computer Games Design Lab & Cyber Security Lab, Motion Capture Studio.

Outside of standard & functional classrooms, BUV also provides a wide range of discussion & breakout rooms with various capacities that students can use for group work or individual study. There is also a 24/7 Study Area that serves as a Quiet Study Area during LRC operational hours.



Order	Category	Number	Total Area (m²)	Module	Usage Schedule (Semester, Academic year)	Remarks
1	Lecture Halls, classrooms, discussion rooms multimedia rooms, multi-purposes rooms, faculty rooms	45	2651			
1.1	Learning Theatres, Halls, Classrooms with over 200 pax	1	464			
1.2	Classrooms with 100- 200 pax	1	370			
1.3	Classrooms with 50-100 pax	1	84			
1.4	Classroom with less than 50 pax	19	966			
1.5	Multipurpose Rooms	6	608			
1.6	Discussion Rooms	15	159			
1.7	Faculty Rooms	2	258,5			
2	Libraries/Learning Resources Centres	1	1230,1			
3	Research centre, laboratories, practical rooms	12	1121			

Research centres, laboratories, and practice facilities

List of Equipment	Module		
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Order	Name of Equipment, Product Code, Usage Purposes	Country of Origin, Model Year	Number	Unit		Time of use	No. of user/unit
Comput	ter Lab 1-4				All	All	
1	PC Computer (Gigabyte Workstation W281- G40)	China/ 2021	31	pcs	modules	academic year	1
2	Monitor Gigabyte 27-inch Gaming monitor	China/ 2021	62	pcs			1
3	Wacom tablet						1
Digital I	_ab 2-4						
4	Apple iMac 27 inch	2019	16	pcs			1
5	Color printer Epson SC-P807	2019	1	pcs			1
6	Scanner Epson Perfection V600	2019	6	pcs			1
LRC Co	mputer Lab	·	·				
7	PC Computer (HP Elitedesk 800 G3)	2018	24	pcs			1
8	Monitor HP Z24i G2	2018	24	pcs			1

11. Lecturers participating in the collaborative programme (List of lecturers with brief information, academic résumés and other evidences of conformance to professional qualification and foreign language competency requirements which are attached as appendices).

Full	Passp	Acad	Academi	Major	(Full time	Insura	Aca	Public	Sig
name,	ort	emic	С	(Highest	contract	nce	dem	research	nat



No (1)	DOB (2)	numbe r/ID Card (3)	title, Awar ding year (4)	qualifica tions, Awardin g country, Awardin g year (5)	qualif- ication) (6)	with Recru nt Recr uitm ent date (7)	BUV) iitme Lab our cont ract (8)	numbe r (9)	ic exp erie nce s (10)	MO ET (11)	Ins titu tio n (12)	ure (13)
1	Joao Manuel Ferrao Fialho	CC7622 87	Dr, 2012	Dr., Portugal, 2012	Mathemat ics; Differentia I Equations , Functiona I Analysis	01/0 9/20 17	x	012897 7592	11	0	14	
2	Noor Zaman Jhanjhi	AM8100 273	Assoc. Prof. Dr., 2015	Assoc. Prof. Dr., Malaysia, 2015	Informatio n Technolo gy	2023	x	x	16	0	x	
3	Hamza Mutaher Abdu Al Shameri	084041 24	Dr, 2022	Dr., India, 2022	Computer Science (Compute r Network)	11/0 4/20 22	x	013204 8533	6	0	4	
4	Viju Prakash Maria John	S69590 86	Dr, 2016	Dr., India, 2016	Computer Science and Engineeri ng	11/0 4/20 22	x	013204 8534	17	0	27	
5	Raja Kumar Muruges an	Z21096 53	Assoc. Prof. Dr., 2011	Assoc. Prof. Dr., Malaysia, 2011	Computer Science	2022	x	x	14	0	x	



6	Fraser James Harrison , 20/06/19 91	547364 218	Maste r	Master, UK, 2022	Software Engineeri ng	01/0 9/20 21	x	#N/A	3	0	0	
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12. Textbooks, reference materials, libraries and other amenities, etc.

Textbooks

Name of textbooks	ISBN	Publisher	Year	Author
Data Science	9780262535434	MIT Press	2018	John D Kelleher, Brendan Tierney
Doing Data Science: Straight Talk from the Frontline	9781449358655	O'Reilly Media	2013	Cathy O'Neil, Rachel Schutt
Starting Out with Python	9780134444321	Pearson	2017	Tony Gaddis
Data Science from Scratch: First Principles with Python	9781492041139	O'Reilly Media	2019	Joel Grus
Introducing Python: Modern Computing in Simple Packages	9781492051367	O'Reilly Media	2019	Bill Lubanovic
Python for data analysis: Data wrangling with Pandas, NumPy, and Python	9781098104030	O'Reilly Media	2022	McKinney, Wes
Mathematical Techniques	9780199282012	Oxford University Press	2008	Jordan, D. W., and Peter Smith
SQL & NoSQL Databases: Models, Languages, Consistency Options	9783658245481	Springer	2019	Andreas Meier and Michael Kaufmann



and Architectures for				
Big Data Management				
Database Systems: A				
Practical Approach to				Connoly T and C
Design,	9789353438913	Addisson Wesley	2019	Connoly, L., and C.
Implementation and				веду.
Management				
Data Mining: Practical				
machine learning tools	9780128042915	Morgan Kaufmann	2016	Witten, Ian H., et al
and techniques				

Libraries

BUV recognises the important role of literacy in all walks of modern professional life, including technical, creative and critical thinking. Therefore, alongside providing adequate access to technology to complete assignments, BUV works closely with industry partners to ensure that students have valuable experience in the hardware and software typically used in their industries, and to anticipate future needs. BUV understands the value of rich content in student engagement and the value of on demand learning that gives students access to specialised information beyond the core deliverables of a semester.

BUV understands that technology is not just defined by digital, or even electronic technology. BUV will invest in specialised spaces and teaching facilities geared to its portfolio of courses and activities.

Alongside a well-resourced physical library and breakout workspace (designated in the Learning Resource Centre), BUV provides students and lecturers access to Kortext, a specialist digital platform delivering over 2 million digital textbooks and other learning content to universities. Additionally, a tablet is provided to each student upon entry to the University allowing them to access digital textbooks with ease anywhere, at any time.

BUV provides open access of 24 PCs and 13 iMacs for students in the LRC's Lab & shared space. To ensure that students could easily access all digital learning resources, all students entering degree programmes from April 2019 were issued Apple iPads.



Students can loan 1494 titles of print books from LRC with a maximum of 5 books each time for 14 days in total. LRC users have access to a range of digital databases and online resources including e-books, journals, articles, case studies, and reports, which are available 24 hours, 7 days/a week on and off campus.

During operation hours between 8.30 am and 6.30 pm from Monday to Friday, there are 13 discussion rooms with a capacity of 4-6 people/room & 26 classrooms with a capacity of 30 people/rooms available for students to book. Students can book rooms with the Student Information Office 1 day in advance at the earliest. Each student can use rooms for at most 1 hour per booking & at most 2 hours per week.

The LRC opens from 8.00 to 18:30 from Monday to Friday; and from 9.00 to 16.00 on Saturday during the teaching & non-teaching period. The LRC also includes a 24-Hour Study Room. This facility is open 24 hours per day, 7 days per week.

Outside operation hours of between 8.30 am and 6.30 pm from Monday to Friday, BUV provides a range of Out-of-hours campus access facilities including the 24/7 Study Area, 6 normal classrooms & 8 functional classrooms for students to book. Students can request Out-of-hours campus access to 24/7 Study Area and classrooms with Student Information Office by 4 pm from Monday to Friday.

Title	Туре	Quantity
ACM Digital Library	Article	117500
Arts & Humanities Database	Journal	7818
	eBooks	21515
	Newspaper	2176
BMJ Journals Online	Journal	70
Ebook Central (formerly known as ebrary)	eBooks	100000
eBooks on EBSCOhost	eBooks	2400000
Emerald Management ejournal collection	Journal	100
Internurse.com (off-campus access	Article	700
JSTOR	Article	1150
Newspapers - Global Newsstream	Newspaper	2800
Performing Arts Database	Journal	100
RCN Journals (Royal College of Nursing)	Journal	11

Online libraries

* Frame Principles for Opening Collaborative programme – Data Science and Artificial Intelligence with UoS



ScienceDirect - Elsevier	Journal	4603
	eBooks	32662
Scopus	Journal	2960
	eBooks	48300
VLeBooks	eBooks	7667
Wiley Online Library	eBooks	20000
	Journal	1600
TOTAL	eBooks	2630144
	Journal	141588

Academic databases in use

No.	Titles	Publisher	Description	
1	Academic	EBSCO	Academic Search Ultimate offers students an	
	Search		unprecedented collection of peer-reviewed, full-text	
	Ultimate		journals, including many journals indexed in leading	
			citation indexes indexed in leading citation indexes to	
			meet the increasing demands of scholarly research.	
2	ProQuest	ProQuest	The database features thousands of full-text journals,	
	ABI/Inform		dissertations, working papers, key business, and	
	Global		economics periodicals such as the Economist, country-	
			and industry-focused reports, and downloadable data. Its	
			international coverage gives researchers a complete picture	
			of companies and business trends around the world.	
3	Euromonitor	Euromonitor	This online market research tool monitors industry trends	
			and gives you strategic analysis and market size and	
			market share database for all your products across all key	
			countries.	
4	Emerald Market	Emerald	Emerald Market Case Studies Front List Collection 2022	
	Case Studies		offers over 600 cases is the product to encourage	
	Collection 2022		entrepreneurial thinking and critical exploration. Each case	
			is accompanied by complimentary teaching notes that	
			have been compiled by teaching faculty at some of the	
			world's best business schools.	



5	Emerald	Emerald	Emerald eBooks Business, Management & Economics
	eBooks		Collection offers over 1,600 eBook titles (1991-2022)
	Business,		broken into 7 subject collections, highlighted below. As well
	Management &		as via the individual collections content from the portfolio can
	Economics &		be accessed in full on a rental basis: Accounting, Finance &
	Social Sciences		Economics; Business, Management & Strategy;
	collection		Marketing; HR & Organization Studies; Public Policy &
			Environmental Management; Library & Information
			Sciences; Tourism & Hospitality Management.
Emerald eBooks Social Sciences collection offers over 1,000 eBook titles (1999-2022) broken			
into two subject collections, Education & Sociology.			
6	PressReader	Emerald	Multidisciplinary e-Journal suite, including more than
	Annual		7,000 articles from magazines such as The Washington
	Subscription		Post, The Guardian, and The Globe and Mail, to Forbes,
			Vogue, Bloomberg Businessweek, Elle, and GQ.

Online learning system

There is a strong focus at BUV on the use of digital tools to help prepare students for future 4IR modes of work, and this supports strategic objective 4: 'Deliver cutting-edge British pedagogical models, teaching methods and education technologies'. BUV has invested heavily in digital learning resources and this investment has enabled BUV to continue to deliver its high-quality programmes despite the challenges Covid-19 has presented.

From an academic perspective, BUV was well equipped to pivot to online and hybrid learning strategies during the Covid-19 pandemic. In April 2019, BUV introduced the digital textbook system of Kortext to increase the speed in accessing textbooks as well as ensuring the most up to date editions were accessible by students. Prior to this, if module leaders wished to adjust a textbook for a module, this would have to be done three months prior to the commencement of the module due to checks required by government ministries on physical learning materials imported into the country. With a digital textbook system in place, this meant that there was an increased amount of flexibility to choose the most appropriate learning resources for the module.

In the October 2019 semester, BUV introduced the Canvas Learning Management System (LMS) from Instructure, which is used as the core BUV digital learning environment. Through Canvas, students can



access learning resources for modules, access documentation and training relevant to their programme of study, access and complete formative and summative assessments (including proctored online exams) and connect to BUV's online teaching platform of BigBlueButton. To ensure that students could easily access all digital learning resources, all students entering degree programmes from April 2019 were issued with Apple iPads. These investments have enabled BUV to continue to deliver its programmes uninterrupted throughout the pandemic, as well as supporting our communications with our students.

Although BUV have always made learning resources available to students online, this was previously done through a relatively basic file management system of Google Drive. To support our strategic objective 4 as discussed above, we introduced the Canvas Learning Management System (LMS) in October 2019. Through this system, students can access learning resources for modules, access documentation and training relevant to their programme of study (and other training provided by the Learning Resources team), access and complete formative and summative assessments, and connect to BUV's online teaching platform of BigBlueButton. As we continue to add functionality to the LMS (for example, with the introduction of the Proctorio online proctoring system for exams) training and support is provided by the LMS team to students and faculty on an ongoing basis, so that all members of the University are both aware of and can utilise the full range of functionality of the LMS. The LMS team also monitors the content provided on Canvas and provides support to faculty where technical errors have been made in the use of the system.

Improving the use of digital tools by faculty is an academic priority, and faculty members must demonstrate a broad use of these tools in their teaching. BUV have recruited an LMS Curriculum Designer to support faculty with the development of new learning materials, so that we can continue to expand our capacity in this area. This position will work closely with the LMS team and the academic leadership team to ensure that all material available is modern, up-to-date and relevant for each module.

Students studying with collaborative academic partners have access to the online journal, database, and textbook resources of the relevant partner. Over the last two years, BUV have begun investing in access to our own digital databases and online resources that go beyond what is available through our collaborative academic partners, and specifically support students on our own-degree programmes. Academic Databases Summary shows the databases currently in use at BUV, as well as previous databases that have been trialed. It also shows the feedback mechanisms that are used with both



faculty and students so that we can make investments in the databases that faculty and students find helpful.

Following the introduction of the Canvas LMS (discussed in paragraph 33), BUV were then equipped to use online learning where required and appropriate. This was used in occasional circumstances where faculty or guest speakers were unable to be physically present on campus but was not a primary mode of delivery.

These investments have enabled BUV to continue to deliver its programmes uninterrupted throughout the pandemic, as well as supporting our communications with our students.

IV. FINANCE

The tuition fee for each student attending the programme, on average, is approximately VND 756,558,000 excluding other fees.

Before or at the time of enrolment, students are obliged to make full payment of tuition fees and other related charges as specified. The tuition fees will be specified by British University Vietnam and subject to notification before the time of enrolment each year and will be published on its website. The tuition fee, if subject to change will be informed to all students as soon as possible and at least one month before the application deadline.

Detail information of tuition fee is published on BUV website: <u>https://www.buv.edu.vn/tuition-fee/</u> The tuition fee policy of BUV can be found in Annex 2.

V. MEASURES FOR ASSURANCE OF QUALITY AND RISK MANAGEMENT

1. Quality assurance measures.

University of Stirling

UoS quality assurance measures

The University of Stirling is committed to maintaining academic standards and delivering consistently high standards of quality in its programmes, thereby ensuring that they provide an excellent academic experience and enable student achievement to be reliably assessed.

Within the obligations set out by both the Quality Assurance Agency for Higher Education (QAA), and the Scottish Funding Council, in line with the national Quality Enhancement Framework, higher



education institutions in Scotland are required to have in place explicit, effective, strategic approaches to quality assurance and enhancement. The University of Stirling Academic Quality Assurance and Enhancement Framework sets out the University's arrangements for academic quality and approach to managing quality and enhancing provision.

A key element of the Academic Quality Assurance and Enhancement Framework is Institution-led Review. Higher Education Institutions in Scotland are expected to undertake Institution-led Review, including both annual and periodic review of education provision in order to be able to determine and demonstrate that required academic standards are being consistently met.

In addition, institutions are expected to reflect, at the institutional level, on strategic issues arising from regular quality processes (including annual and periodic reviews), and to make use of this information as part of the overall strategic approach to quality enhancement. This strategic approach and its effectiveness are explicitly considered during Enhancement-led Institutional Reviews (ELIR).

The Policy and Procedure on Quality Monitoring and Evaluation sets out the University's arrangements for quality monitoring and evaluation across Module Review, Annual Programme Monitoring and Quinquennial Learning and Teaching Review. The preparation of the policy and procedure has taken account of the <u>UK Quality Code for Higher Education</u> and the associated <u>Advice and Guidance on Monitoring and Evaluation</u>.

2. Measures for risk management, assurance of student's rights and interests in case of early termination of the collaborative programme.

Given any dispute between the two universities in the course of cooperation, the President of British University Vietnam and the Vice-Chancellor of University of Stirling will, to the best of each party's capacity, endeavour to resolve the problems through discussions and meeting at university senior management levels. This is further outlined in the attached contract.

Given one party's desire to terminate the collaboration, the other is entitled to be notified one year in advance. Meanwhile, the two parties are committed to enabling all current students to complete their degree programme.

British University Vietnam is responsible for ensuring the safety and academic quality for students attending the University to enable them to achieve a Bachelor degree of the highest standard possible



in order to meet the employment and development needs of Vietnam in an international context and for the sake of students.

VI. MECHANISM FOR MANAGEMENT OF COLLABORATIVE PROGRAMME

1. Organizational structure of management (enclosing their personal résumés in Appendices). British University Vietnam:

Chris Jeffery	Chief Academic Officer
Jason MacVaugh	Dean (Higher Education)
Tony Summers	University Registrar
Tran Duc Trung	Deputy University Registrar
Hoang Phuong Yen	Course Office Manager

University of Stirling:

Neville Wylie	Deputy Principal
Gordon Leonard	Head of Partnerships, Directorate for Internationalisation and
	Partnerships
Iona Beveridge	Academic Registrar
Natalie Webster	TNE Partnerships Manager
Lee Zhuang	Executive Director for Internationalisation and Partnerships

2. Rights and responsibilities of participating parties.

British University Vietnam will be fully responsible for any financial matters in accordance with Vietnamese law referring to the collaboration programme with University of Stirling.

In addition, British University Vietnam will be fully responsible for all the costs regarding programme transfer, staff development and quality assurance assessments. All the payment will be made in GBP and should be transferred to the bank account of University of Stirling within 30 days from receiving payment requests.

For detailed responsibilities of the parties on the collaborative programme, please see the Collaboration Agreement.

3. Rights and responsibilities of lecturers, students and other related parties.



For detailed responsibilities and rights of the lecturers, students and other parties on the collaborative programme, please see the Collaboration Agreement.

L TRƯỜNG ĐẠI HỌC ANH QUỐC VIÊT NA **Professor Rick Bennett Deputy Vice Chancellor and Vice President**

BRITISH UNIVERSITY VIETNAM