Curriculum Development in Data Science and Artificial Intelligence

599600-EPP-1-2018-1-TH-EPPKA2-CBHE-JP

Accreditation Report of Developed Curricula

In Partner Countries

August 2020

PROJECT INFORMATION

Acronym	DS&AI
Project Title	Curriculum Development in Data Science and Artificial Intelligence
Contract Number	599600
Start Date	15 Nov 2018
Duration	36 months

DELIVERABLE INFORMATION

Deliverable Number	4.1
Deliverable Title	Accreditation Report of Developed Curricula in Partner Countries
Submission Due Date	30.05.2020
Actual Submission Date	21.8.2020
WP Number and Title	WP4.1: Accreditation Report of Developed Curricula
WP Lead Beneficiary	AIT
Author and Organization	University of Peradeniya (UOP)
Dissemination Type	Report
Dissemination Level	All Project Partners
Quality Reviewer 1	AIT
Quality Reviewer 2	LEU
First Quality Review Date	24 August 2020
Quality Review Pass Date	31 August 2020

DISCLAIMER

Contents

Abstract

This is the first report on the necessary processes required to obtain accreditation for the MSc programme in each of the Asian partner countries, namely, Thailand, Sri Lanka and Indonesia. A second report is due at the end of the project and will show the results of the actions taken by each Asian partner as well as the evidence of accreditation.

Each participating Higher Educational Institution (HEI) in the Erasmus+ DS&AI consortium has progressed well in developing and accrediting the Master's Degree Programme in DS&AI following the country-specific and university-specific guidelines that differ slightly from country to country. More specifically, for Thailand, the programmes at AIT, KKU and WU have been officially reviewed, approved and accredited by the university and authorized entities. At AIT, the programme has been launched with a successful first intake, while KKU and WU will start delivering their programmes to admitted students in December 2020 and in January 2021, respectively.

For the HEIs in Sri Lanka: UOP and USJP have proposed the developed Master's programmes in DS&AI to the relevant boards of their institutes. The approval of the curricula by the authorized bodies is expected to be obtained by the end of 2020, enabling both institutes to launch the programmes by February 2021.

For the HEIs in Indonesia: USU has obtained the final approval of the new Master's programme in DS&AI by the authorized boards of the university. Thus, the admission process is starting soon, and the programme will then commence in February 2021. UNSYIAH has developed, presented and submitted the programme to the relevant boards and is now in the curriculum revision process. The programme approval is expected to be within January 2021, and the commencement will take place in February 2021. ITB has revised its existing Master's curriculum to offer a new specialization in DS&AI. The specialization has pilot testing its first student intake since August 2020. The formal approval and declaration of the new specialization is expected to be within early 2021.

Introduction

Higher education accreditation is a type of quality assurance process under which services and operations of post secondary educational institutions or programs are evaluated by an external body to determine if applicable standards are met. If standards are met, accredited status is granted by the agency. In most countries around the world, the function of educational accreditation for higher education is conducted by a government organization, such as a ministry of education.

During this project, the accreditation of the proposed Master's Degree programme is taken place. Each university in the three Asian partner countries running the program have completed / are in the process of taking the steps to accredit the Master's Degree Programmes following the country specific guidelines that differ slightly from country to country.

Collecting samples of student work, syllabi, textbooks, and sample assignments, preparing reports, scheduling and preparing for the on-site visits, obtaining expert feedback or similar activities that need to be done for the accreditation, have been carried out by the partner universities.

The accreditation provides assurance that the Master's programme meets the quality standards of the profession for which that programme prepares graduates. The accreditation process normally begins around five months before the beginning of the delivery of the programme.

This report contains the details on the steps necessary to be taken by each HEI in the three Asian partner countries.

Accreditation Report of Developed Curricula in Thailand

AIT, KKU, WU

Overview of Higher Education System in Thailand

Accreditation and Quality Assurance Process

In Thailand, the Ministry of University Affairs/MUA introduced accreditation and quality assurance in 1996. Internal and external quality assurance was brought forward through the National Education Act 1999. As per the act, quality assurance in higher educational institutions (HEIs) includes an external and internal system. All public and private HEIs have set up quality assurance systems and have worked towards quality teaching. For internal accreditation and quality assurance, the internal mechanisms are employed. External quality assurance is through ONESQA or Office for National Education Standards and Quality Assessment, which is a public organisation responsible for external assessment.

Foundation for Thai quality assurance framework lies in formulation of standard criteria and requirements established by MUA for degree courses in the nation. All degree courses provided at public and private HEIs have to attain standard criteria before they are approved for starting operations. Over the years, approval authorisation has been transferred by MUA to public higher educational institutions. Governing councils as well as academic boards are responsible for quality of educational provision and this includes academic standard control. External persons with expertise are invited by some of the universities for review of developing curricula and reviewing internal activities. Accreditation system is associated with professional degrees such as architecture, nursing and medicine. For private HEIs, MUA takes care of approval of degree programmes and accreditation. MUA is currently known as the Office of Higher Education Commission (OHEC) under the Ministry of Higher Education, Science, Research and Innovation (MHESI). Three aspects of quality control are under its aegis namely quality control, audit and assessment.

Academic Year and Credit System

An academic year in Thailand is divided into two regular semesters, which is the first and the second semester, there may be an optional summer session following the second semester, a.k.a. special semester. A regular semester normally lasts no less than 15 weeks. A summer semester lasts about six weeks. Thailand's credit system is used to represent the amount or learning hours, defined as follows:

- Lecturing or any instruction that is equivalent to 1 hour per week throughout the whole semester or approximately 15 hours in a semester is measured as 1 credit.
- An operation, experiment, or a laboratory activity that takes 2 to 3 hours per week throughout the whole semester or between 30 to 45 hours in a semester is measured as 1 credit.
- Independent study, research, thesis or internship that takes 3 to 6 hours per week throughout the whole semester or between 45 to 90 hours in a semester is measured as 1 academic credit.

Accreditation Process and Status of Developed DS&AI Curricula in Thailand

Asian Institute of Technology (AIT)

AIT started related activities involving the development, accreditation and delivery of the Master's programme in DS&AI in June 2019. The programme has already been approved and accredited, and delivery to the first batch of students has begun. Table 1 depicts the entire process and the period of undertaking each activity. Hence, at AIT the programme has officially launched its first semester with 31 students from various countries in South-East Asia and South Asia including Thailand, Philippines, Myanmar, Nepal and Bangladesh.

Table 1: Curriculum development and accreditation process at AIT

Activity	Period/Date	Status
Demand & competitiveness analysis and curriculum development	June - Sep 2019	Completed
Review and approval from the School of Engineering and Technology (SET)	4 December 2019	Completed
Endorsement from the Dean of the School	21 January 2020	Completed
Endorsement from the Academic Senate Chair	29 January 2020	Completed
Review and approval of the curriculum proposal and structure from the Academic Development Review Committee (ADRC)	26 February 2020	Completed
Review and approval of the curriculum proposal and from the Academic Senate	25 March 2020	Completed
Review and approval of the course outlines from the Academic Development Review Committee (ADRC)	14 July 2020	Completed
Review and approval of the courses outlines from the Academic Senate	22 July 2020	Completed
Programme promotion for the first intake	Jan - July 2020	Completed
Student admission for the first intake	Jan - July 2020	Completed
Commencement of the programme for the first intake	4 Aug 2020	Completed

Khon Kaen University (KKU)

At Khon Kaen University, it is mandatory to submit an application for adding a new academic program to the university's yearly strategic plan before the accreditation process can start. The application is reviewed by the management board of the Faculty of Science, KKU before it is submitted to the university level. Once the application is approved and the master program in DS&AI is recorded as a part of the university's strategic plan, the accreditation process shall begin.

Table 2 presents the steps in the accreditation process at KKU and timelines. The internal committee and external committee are set up before the accreditation. The internal committee is responsible for preparing the proposal, surveys, and all relevant information. The external committee is comprised of experts in the DS&AI field from both academia and industry. The external committee is responsible for reviewing the proposal and they give recommendations to improve the curriculum.

Table 2: Curriculum development and accreditation process at KKU.

Activity	Expected date of completion	Date of completion/Status
Proposal writing and demand survey	December 2019	December 2019
Submission to the external committee for recommendations	January 2020	January 21, 2020
Submission to the academic board of the Faculty of Science	March 2020	February 6, 2020
Submission to the management board of the Faculty of Science	April 2020	February 20, 2020
Approval from the university's screening board	June 2020	April 22, 2020
Approval from the university's academic board	August 2020	June 22, 2020
Approval from the University Council ** Dissemination and student admission is allowed to start after receiving the approval in this step	October 2020	July 1, 2020
Acknowledge from the Ministry of Higher Education, Science, Research and Innovation	December 2020	In progress
Advertising the programme	October 2020	In progress
Placement tests and interviews for selection	October 2020	August 1, 2020
Commencement of the programme	December 2020	December 21, 2020

DS&AI

Co-funded by the
Erasmus+ Programme
of the European Union

Walailak University

WU began the process of the development, accreditation and delivery of the Master's program in DS&AI in February 2020. The entire process and the period of undertaking each activity including programme fee are presented in Table 3.

Table 3: Curriculum development and accreditation process at WU.

Activity	Expected date of completion	Date of completion/Status
Proposal Writing and Demand Survey	February 2020	27 February 2020
Submission to the external committees for recommendations	March 2020	8 April 2020
Submission to the academic board of the School of Science	April 2020	10 April 2020
Submission to the management board of the University	May 2020	7 May 2020
Approval from the University's Academic Board	June 2020	17 June 2020
Approval from the University Council	July 2020	11 July 2020
Acknowledgement from the Ministry of Higher Education, Science, Research and Innovation	August 2020	In progress
Advertising the Programme	November 2020	In progress
Placement tests and interviews for selection	December 2020	-
Commencement of the programme	January 2021	-

Accreditation Report of Developed Curricula in Indonesia

USU, ITB, Unsyiah

Overview of Higher Education System in Indonesia

Accreditation and Quality Assurance Process

Government of Indonesia classifies three types of public universities in Indonesia based on their operational status i.e. ministry's working unit (Satuan Kerja/Satker), public service agency (Badan Layanan Umum/BLU), and legal entity state university (Perguruan Tinggi Negeri Badan Hukum/PTNBH). The fundamental differences between them are in their structural and financial operations, human resources organizations, and their academic affairs. The most autonomous type of public universities is the legal entity state university such as USU and ITB. As for Unsyiah, it holds a public service agency status.

For USU and ITB, the decision to change or update the curriculum as well as to open and close the study program are in Rector (President University) with the recommendation of their academic senates. However, for the study program to operational fully and recognize by public and industry, it must acquire accredited status from Indonesia's Higher Education National Accreditation Body (Badan Akreditasi Nasional Perguruan Tinggi/BAN-PT), based in Jakarta. BAN-PT also has role to assess the quality of higher educations both public and private universities in Indonesia. According to the new regulation in 2020, BAN-PT classifies the accreditation of higher educations and their study programs as:

a. A, B, and C for accreditation conducted based on 7 standards accreditation instruments; and
b. Superior, Very Good, and Good for accreditation conducted with IAPS 4.0 and IAPT 3.0 systems.

These dual systems due to the transitions between the 7 standards system into the new IAPS 4.0 and IAPT 4.0 new systems. IAPS is the accreditation instruments for study program and IAPT is the accreditation instruments for the institutions. Using this regulation as stated in point (b), a new study program such as Master of DS&AI will be classify using IAPS 4.0 accreditation system. As a new study program DS&AI will have to meet minimum requirements of Good Accreditation. The accreditation proposal should be submitted to the online accreditation system, known as SAPTO (https://sapto.banpt.or.id/).

Academic Year and Credit System

An academic year in Indonesia is divided into two regular semesters. The two semesters are called odd and even semester. Odd semester is the first semester in the new academic year, started in early September, while even semester is started in February. New postgraduate students' intakes are conducted in both semesters. One semester is consisting of 16 weeks, which is regulated by a credit semester system:
- One credit is equivalent to 50 minutes of structured lecturing in class (face-to-face), 50 minutes of self-study, and 50 minutes of non-structural study.
- One credit of laboratory activity is equivalent to 1 hour and should be conducted in at most 10 weeks.
- Internship is usually given 2 credits or 100 minutes of works in an institution chosen by the student for the whole semester.
- Final Project, Thesis and/or Dissertation will be given 6 to 8 credits or 5 to 7 hours per week throughout the whole final semester.

Accreditation Process and Status of Developed DS&AI Curricula in Indonesia

Universitas Sumatera Utara (USU)

Activities related to the development of Master of DS&AI's curricula has been started since September 2019 after the conclusions of study visits to Athens and Leiden. At the time this report is submitted (July 2020) USU has developed the new curricula and the establishment of the new study program is still in progress and waiting for the academic senate recommendation. It is expected that the decision to open the new study program will be delivered in the mid of August 2020. The national accreditation process will follow. It is expected that the process DS&AI's accreditation will be completed in September 2020. Table 1 below shows more details of the entire process.

Table 1: Curriculum development and accreditation process at USU

Activity	Period/Date	Status
Demand and competitiveness analysis development	June - Sep 2019	Completed
DS&AI curriculum development	Sep – Dec 2019	Completed
Selecting the faculty members responsible for drafting the DS&AI proposal	January, 2020	Completed
Writing DSAI master's degree proposal	Jan - June 2020	Completed
Proposal presentation to the USU's academic senate and internal academic assessors	July 23, 2020	Completed
Writing the accreditation proposal to be submitted to the National Accreditation Body for Higher Education (BAN-PT)	June - July, 2020	Completed
Submission of the accreditation proposal to the academic senate commission for further review	August 6, 2020	Completed
Evaluation of the instrument accreditation by the USU's academic senate commission and internal auditors	Aug 11, 2020	Completed
Academic Senate Commission approval	August 12, 2020	Completed
University Senate Recommendation on the Opening of the new Master Degree Program in DSAI	August 19, 2020	Completed
Submission of the accreditation proposal to the National Accreditation Body for Higher Education via SAPTO	End of August, 2020	Expected
Student admission for the first intake	Mid Sep 2020 - mid Jan 2021	Expected
Commencement of the program for the first intake	Mid Feb, 2021	Expected

Activities related to the development of Master's curriculum in DS&AI have been started since September 2019 after the conclusions of study visits to AUEB, Athens and LEU, Leiden. Our Master's programme in DS&AI will run under the magister in Informatics, School of Electrical Engineering and Informatics (SEEI), as one of the programmes which can be selected by prospective students prior to their admission. Currently, study programmes of magister in Informatics comprise the programme of Business Intelligence which focuses on data science and engineering, and the programme of Intelligent Systems which focuses on Artificial Intelligence. These two programmes have been accredited as excellence (accredited-A from August 3rd, 2017) by the National Accreditation Body for Higher Education (BAN-PT).

As a pilot, starting from the 2020 intake, the students who selected the Business Intelligence and of Intelligent System under the magister of Informatics, will have compulsory courses equivalent to the core courses of DS&AI curriculum. The new programme Data Science and Artificial Intelligence, is expected to be formally declared in April 2021 and it will be formally used for the intake of July 2021 onward. Table 2 below shows details of the entire process.

Table 2: Curriculum development and accreditation process at ITB

Activity	Period/Date	Status
Demand and competitiveness analysis development	June - Sep 2019	Completed
DS&AI curriculum development	Sep – Dec 2019	Completed
Selecting the faculty members responsible for adopting the DS&AI curriculum into the existing curricula of post-graduate study program in Informatics	December, 2019	Completed
DS&AI Curriculum adoption into the existing curriculum in collaboration with curriculum team of post-graduate study program in Informatics.	Feb - April 2020	Completed
Presentation of new curricula in front of post-graduate study program of Informatics' academic staff	April 2020	Completed
Dissemination of DS&AI program to selective prospective students	July, 2020	Completed
First intake of students under the new adoption curriculum of DS&AI; accepted students: Business Intelligence (DSE) = 12 students, System Intelligence (AI) = 21 students	August 2020	Completed
Submission of the new structure of curricula to academic senate of School of Electrical Engineering and Informatics	September, 2020	Expected
Presentation of the new curricula in front of senate of School of Electrical Engineering and Informatics	Oct-Nov, 2020	Expected
Formal declaration of new options' name from ITB and its dissemination by post-graduate master program in Informatics	April 2021	Expected

Co-funded by the
Erasmus+ Programme
of the European Union

Universitas Syiah Kuala (Unsyiah)

The activities to the develop the Curriculum of Master Program in DS&AI have been started in mid 2019 and continued in November 2019 after the two weeks study visits to the AUEB in Athens and Leiden University in Netherlands. At the time this report was submitted at the end of July 2020, Unsyiah has received the first feedback from the University Quality Assurance (QA) Agency for the curriculum for master program in DS&AI, proposal to open the new program in DS&AI, and the instruments of fulfilling the minimum requirements for accreditation of opening new study program. The revision is in progress and expected to be resubmitted for the second review in third week of August 2020. Once the document passes the University QA Agency, it will be forwarded to the university academic senate for the final recommendation. After that, the document will be submitted online to the Minister of Education and Culture for national review and recommendation using the system at silemkerma.ristekdikti.go.id/akademik.

Unsyiah is expecting to receive the approval and recommendation from the Ministry of Education and Culture at the latest the end of this year. Therefore, the commencement of the Master Degree Program in DS&AI for the first intake will be started in mid February 2021. Table 3 summaries the status of curriculum development and accreditation process at Unsyiah.

Table 3: Curriculum development and accreditation process

Activity	Period/Date	Status
Demand and competitiveness analysis development	June - Sep 2019	Completed
DS&AI curriculum development	Sep – Dec 2019	Completed
Selecting the faculty members responsible for drafting the DS&AI proposal (Rector's Decree 241/UN11/KPT/2020)	Jan 24, 2020	Completed
Preparing the proposal, curriculum master degree in DS&AI, and the instruments for acreditation using the standard instruments from the Ministry of Education and Culture	Feb - May 2020	Completed
Proposal presentation to the Faculty of Science academic senate and internal academic assessors	May 2020	Completed
Submission of the proposal and curriculum to the university Quality Assurance Agency for first review	Jul 2020	Completed
Submission of the proposal and curriculum to the university Quality Assurance Agency for the second review after revision	Aug 20, 2020	Expected
University Senate recommendation on the opening of the new Master Degree Program in DS&AI	Aug 27, 2020	Expected
Proposal and accreditation instruments submission to the Ministry of Education and Culture via silemkerma.ristekdikti.go.id/akademik	Sep 10, 2020	Expected
Approval and recommendation from the Ministry of Education and Culture	Jan 2021	Expected
Student admission for the first intake of the DS&AI Programme	Jan 2021	Expected

| Commencement of the Master Degree Programme in DS&AI for the first intake | Mid Feb, 2021 | Expected |

Accreditation Report of Developed Curricula in Sri Lanka.

UOP, USJP

Overview of Higher Education System in Sri Lanka

Accreditation and Quality Assurance Process

The University Grants Commission (UGC) is the apex body of the University System in Sri Lanka which was established on 22nd December 1978 under the Universities Act No. 16 of 1978. The functions of the UGC are; planning and coordination of university education, allocation of funds to Higher Educational Institutions (HEIs), maintenance of academic standards, regulation of the administration of HEIs and regulation of admission of students to HEIs. The UGC appoints Standing Committees for specific purposes, consisting of such members and with such powers, duties and functions as may be determined by the Commission.
(https://www.ugc.ac.lk/home/21-quality-assurance-and-accreditation.html)

The main role of the Standing Committee on Quality Assurance and Accreditation would be to function as the advisory body to UGC - QAAC and vigorously pursue/promote QA programmes according to universities.

In this regard the following specific activities will be pursued:

- Initiate actions on policy directions issued by the UGC from time to time and take steps to implement prescribed initiatives, programmes and activities at university/campus/institute level.
- Function as a catalytic unit to promote new initiatives and reforms to improve and advance the quality and relevance of all undergraduate and postgraduate degree programmes and convey to the Commission for consideration.
- Function as the advisory body of the QAAC of UGC and also as the monitoring and reporting body of the quality assurance and accreditation programme undertaken by QAAC.
- Engage in designing and introduction of regulatory framework (i.e. pre-requisites, uniform credit and qualification framework, and standard teaching and training, and evaluation methods) to promote lateral mobility of students among non-professional degree programmes such as Agricultural Sciences, Natural and Applied Sciences and Liberal Arts and Humanities.
- Frame guidelines for planning of new undergraduate degree programmes, namely, a) ways and means of evaluating need and demand, b) graduate profile, c) structure of the study programme, d) courses and intended learning outcomes and planning for course modules, e) evaluation procedures and f) credit qualification framework for natural and applied science degree programmes.

Sri Lanka Qualifications Framework (SLQF https://www.ugc.ac.lk/en/all-notices/1156-sri-lanka-qualifications-framework.html) is an important element of systems development in the higher education sector, which at the end offers a transparent and coherent framework for the learner to optimize his/her objective of learning throughout life, while at the same time improving many vital aspects of learning and assessing the learning process.

The SLQF is useful to the HEIs, both in the state sector and non-state sector in designing courses as the minimum level of learning outcomes required for each qualification is indicated by the minimum number of credits that should be earned by a qualification holder. Thus, the SLQF will contribute

towards strengthening the quality of higher education qualifications offered by universities and other HEIs in Sri Lanka.

The SLQF will assist in the evaluation and 4 recognition of qualifications offered by Sri Lankan HEIs and this will be useful to the qualification holders to identify the level of their qualifications. In addition, the SLQF will assist potential employers to know the level of learning and the attributes of a particular qualification holder.

Academic Year and Credit System

An academic year in Sri Lanka is divided into two regular semesters, which is the first and the second semester with duration of 15 weeks each. Sri Lanka's credit system is used to represent the amount or learning hours, defined as follows:

- Lecturing or any instruction that is equivalent to 1 hour per week throughout the whole semester or approximately 15 hours (or or 50 notional hours) in a semester is measured as 1 credit.
- An operation, experiment, or a laboratory activity that takes 3 hours per week throughout the whole semester or 30 hours (or 100 notional hours) in a semester is measured as 1 credit.
- Independent study, research, thesis or internship that takes 5000 notional hours adding 6 credits.

Accreditation Process and Status of Developed DS&AI Curricula in Sri Lanka

University of Peradeniya (UOP)

UOP started related activities involving the development, accreditation and delivery of the Master's programme in DS&AI December 2018. The programme is in the process of approving the revised submission to the UGC.

Table 1: Curriculum development and accreditation process at UOP

Activity	Period/Date	Status
Proposal Writing	December 2018	Completed
Demand Survey	August 2019	Completed
Submission to the relevant Board of study of the Faculty of Graduate Studies	03 December 2019	Completed
Submission to the relevant board for curriculum development at the University	29 January 2020	Completed
Incorporating the recommendations	February 2020	Completed
Approval from the University	11 March 2020	Completed
Submission to the University Grants Commission for approval	September 2020	In progress
Incorporating the recommendations	September 2020	Completed
Submission to the Ministry of Higher Education for approval	October 2020	Completed
Approval of the revised curriculum by the Ministry of Higher Education	November 2020	Expected
Advertising the Programme	December 2020	Expected
Placement tests and interviews for selection	January 2021	Expected
Offering the Programme	February 2021	Expected

Table 2: Curriculum development and accreditation process at USJP.

Activity	Period/Date	Status
Joint discussion between Department of Statistics and Department of Computer Science	January 2019	Completed
Appointment of members from the Department of Statistics	January 2019	Completed
Appointment of members from the Department of Computer Science	March 2019	Completed
Demand survey	May 2019	Completed
Curriculum Development workshop	July 2019	Completed
Proposal Writing	February 2020	Completed
Submission to Center for Quality Assurance	March 2020	Completed
Approval of Center for Quality Assurance	April 2020	Completed
Submission to Faculty of Graduate studies	May 2020	Completed
Approval of Faculty of Graduate studies	May 2020	Completed
Submission to the Senate	June 2020	Completed
External reviewer's evaluation	Expected: August 2020	One reviewer's comment has been received. Waiting for the other.
Approval of the Senate	August 2020	Expected
Submission to University Grant Commission	September 2020	Expected
Approval of University Grant Commission	December 2020	Expected
Application Calling	December 2020	Expected
Start of the program	January 2021	Expected

Conclusion

All Eight HEIs in the three Asian partner countries have successfully completed their curriculum development process and have submitted the necessary documents for the programme accreditation to the relevant authorized bodies in their respective countries. Since AIT has already obtained the curriculum accreditation, the programme was launched with the first intake of 30 students in August 2020. Other institutes including KKU and WU, Thailand and USU, Indonesia have also proceeded to have their programmes accredited and will commence their programmes within February 2021. UOP and USJP from Sri Lanka and UNSYIAH from Indonesia expect to obtain the curriculum accreditation within January 2021, and hence they can start their programmes within February 2021. For ITB from Indonesia, the new programme Data Science and Artificial Intelligence, is expected to be formally declared in April 2021 and it will be formally used for the intake of July 2021 onward.