

ାତୀୟ ଶିକ୍ଷାନୀତି - ୨୦୨୦

ନୂତନ ସ୍ନାତକ ଶିକ୍ଷା ପାଠ୍ୟକ୍ରମ ଏବଂ ତାହାର କାର୍ଯ୍ୟକାରିତା ଓଡ଼ିଶା ଉଚ୍ଚଶିକ୍ଷା ବିଭାଗର ପ୍ରସ୍ତୁତି

> ଓଡ଼ିଶା ରାଜ୍ୟ ଉଚ୍ଚଶିକ୍ଷା ପରିଷଦ ପୃଷକ ଭବନ ଏ/୧୧, ଶୁକ ବିହାର, ଭୂବନେଶ୍ୱର

Salient Features of the New Curriculum Design

Multiple entry and exit. Exit can be after 1"yr/ 2"dyr/ 3"dyr and 4th yr. į,

4yr. Degree Hons Program is of two types with or without research. Those with ii. research are now eligible to appear to NET UGC and can directly join Ph.D.

- 4 yr. Degree Program with Research will be available with universities offering iii. both PG & UG Program (Like Ravenshaw University, Gangadhar Meher University, Rama Devi Women's University, Khallikote University, Dharani Dhar University and Vikram Dev University etc.) Besides other colleges with PG Department in concerned subject having at least 50% sanctioned faculty members with Ph.D. University have to recognize such colleges for UG 4yr Research
- The following shall be the types of courses as per UGC Guideline. iv.
 - ✓ Core I (Major/Hons)
 - · Core II (Minor/Pass)
 - Core III (Minor/.Pass)
 - ✓ Ability Enhancement Course
 - ✓ Skill Enhancement Course
 - ✓ Multi-Disciplinary Course
 - √ Value Added Course
 - ✓ Vocational Course (To be offered in summer vacation 1 & 2)
- The Minimum Credit Prescribed are as follows V.

Credits

a) Three years with single major with 2 minors 126 b) Three years with double major 150 c) Three years three minors (without major) 126 d) Four years with Research/without Research 166

Students may acquire additional credit under Value added / Multi-Disciplinary / Swayam etc. The additional credit shall not be taken into account for Division/ Grade/ Rank etc. They shall not count for admission into higher program.

- The level of the course has been defined as per UGC/ National Credit Framework vi. etc.
- The Division between internal Assessment / Term End University Exam shall be Vii. 40:60.
- Definition of credit follows the UGC pattern. viii. One Credit = 15 hours of Theory teaching or 30 hours of Practical
- Under Ability Enhancement Course Odia & English has been prescribed. In lieu ix. of Odia one may opt for Hindi/ Sanskrit/ Urdu. UGC Prescribes English + 1 Indian Language (under VIIIth Schedule) as compulsory.

- x. Those who discontinue after 1styr. or 2ndyr. may return to the system but must complete 3yrs course within 7 years. Admission to 2 or 3rd year can be taken only in the college from where one had discontinued.
- xi. Basket of course under Value Added / Multidisciplinary / Vocational etc. will beoffered and students shall have choice. However, colleges/University may impose restriction depending on available infrastructure/ faculty.
- xii. For all value-added courses VTP Utkal University shall prepare video lectures and incase colleges are unable to hold classes, shall hold doubt clearing session. These courses shall have no internal component.
- xiii. VTP Utkal and Upcoming VTP in other universities shall prepare video lectures and attempt shall be made to make available video lectures for the entire range of course prescribed.
- xiv. Courses of studies have been designed by BOS (Of Various Universities) with members drawn from parent/ Other Universities/ Industry/ Research Institute. Further, the syllabus has been reviewed by experts mostly drawn from outside the state and distinguished scholars from within state (not from Inservice faculty members of State University / Colleges).
- Refresher Courses for all core subjects are planned. These will cover topics newly introduced which present faculty members haven't studied during their PG Course.
- xvi. Joining Digi lockers (By students) and ABC(Academic Bank of Credit) by Universities and Auto Colleges is a must for successful operation of the new system. Online result publication shall be linked with ABC and Digi locker.
 - The present exercise has also covered BSW(social work), BITM, BCA and Journalism etc.
 - BBA is yet to be developed as new AICTE curriculum is awaited. Jagannath Sanskrit University is working on their courses.
 - The MS Law University has to develop its integrated curriculum at par with Bar Council of India's norms.
 - Integrated BA+ B. Ed curriculum will be developed by OSHEC in collaboration with universities and TE colleges. The NCTE Guidelines will be followed
- xvii. The students have been allowed to choose core courses across faculty (i.e. Science/Arts/Commerce etc.) and this would promote convergence of knowledge.

- radiate shall be decided by taking into account the results of all colleges (Auto/Non-Auto) Constituent Dept. of the University from amongst 1"

 Addition Credits / Summer Vocational Courses.
- The Regulation has been approved by the Vice Chancellors through circulation and online meeting. The COEsofUniversities have met several times to work out details. Besides Prof. S.K. Das, Former President of BSE Odisha, Prof. P.K. Behera, Academic Consultant (Former COE, Utkal University), Prof. T.K. Tripathy Academic Consultant (Former Vice chairman CHSE) and Prof. S.P. Pani Executive Member, OSHEC were involved at all stages of formulation of Regulation under the outstanding leadership of Prof. A.K. Das, Vice Chairperson OSHEC.
- xx. E-Content in Odia for courses shall be developed by The Odisha State Bureau of Textbook Preparation and Productionand hosted in their website and made available free of cost.

ODISHA STATE HIGHER EDUCATION COUNCIL

Draft Model Regulation for Under Graduate Programmes with Multiple Entry and Exit Option

1. Title and Commencement:

a) These regulations shall be called "Curriculum and Credit Framework for under graduate programme". The framework facilitates a restructured degree programme with multiple entry and with exit option for single major, double major and with or without major option. It promotes Multi/Interdisciplinary choices subjects and disciplines. It inspires to meet the 21st century requirements of quality of Higher Education and needs of India to be a developed country. Its objective is to build well rounded creative individuals and citizens. This is meant for 3/4 years Undergraduate Degree Programmes covering all disciplines of the State Public Universities, coming under the Higher Education Department, Government of Odisha. It aims to coverage multiple disciplines such as Science, Arts, Humanities and Business Studies etc.

2. Definitions of Components:

- a) Academic Year: Two consecutive (one odd + subsequent even one) semesters constitute one academic year.
- b) Choice Based Credit System (CBCS): The CBCS allows students to choose courses from a range of options, and earn credits for the courses they complete. It is designed to provide flexibility and enable students to pursue their interests and strengths. The students select courses from the prescribed courses i.e., Core, Multidisciplinary, Ability Enhancement Course (AEC), Skill Enhancement Course (SEC), Value Added Course (VAC), Summer Internship and Research Project/ Dissertation etc.
- e) Core is the subject of main focus, may be under Core-I, Core-II and Core-III (Major/Minor stream). Major or Honours will be awarded provided the students acquires 92 credits from a single subject under core-I in the 4 yr. Program.
- f) Course: Usually refers to 'paper', which is component of a programme.
- g) Requirements: The requirement for awarding a degree/diploma/Certificate is prescribed in terms of number of credits to be earned as per Table No. I,II,III,IV,V,VI,VII.
- h) Credit: A unit by which the course work is measured. One credit is equivalent to one hour of lecture or tutorials or two hours of practical work/field work per week in a semester. One Credit will be generally equivalent to 15 hours of instructions.

Credit for different Classes

Credit	Theory	Tutorial	Practical/Field work
1	1 Hour	1 Hour	2 Hours

- i) Credit Point: It is the product of grade point and number of credits for a course.
- j) Discipline/Faculty: A group of related subjects i.e., Faculty (Science/Arts/Commerce etc.)
- k) Grade Point: It is a numerical weight allotted to each letter grade on a 7 -point scale.
- l) HEIs: It refers to "Higher Educational Institutions' (Colleges/Universities).
- o) Programme: It is a study in a discipline leading to award of a degree, diploma or certificate.

p) Semester: Each semester comprises of 90 working days and an academic year is divided into two semesters. The odd semester may be generally scheduled from July to December and even semester from January to June.

3. Eligibility for Admission into UG 1st year Degree:

- 3.1. Student who has Passed Higher Secondary (Class-XII) Examination conducted by CHSE Odisha, Senior Secondary (CBSE/ICSE) or any other equivalent course from any Board/Council established by the Govt. of India or any other state Government or any such course recognized by Higher Education Department, Skill Development & Technical Education Department or any other Dept. of Govt. of Odisha shall be eligible for admission into a first year UG programme satisfying "Curriculum and Credit Framework for undergraduate programmes", published by UGC on 12th December 2022. Those who have completed diploma course SCTEVT (State Council for Teacher Education and Vocational Training) Govt. of Odisha after completion of BSE, Odsiha are also eligible for admission to degree program.
- 3.2. Transfer from one HEI to another beyond the admission period shall be allowed by the affiliating Universities, even for Autonomous College. Transfer shall be subject to the following conditions: -
 - · HEI must not exceed the sanctioned strength of seat
 - · Availability of same combination of subjects in both the HEIs
 - Attendance shall be combined in case one semester is pursued in two colleges.
 Further, the University may allow migration from one university to another university on transfer of credit.

4. Counselling of Students:

- 4.1. After admission in to 1st Year Degree Programme, students have to be properly counselled by the authorities of the Institutions by organizing induction programmes. Similarly, during beginning of the 3rd Semester and end of the 4th Semester, the students have to be properly counselled about the choice of subjects, skill development courses etc. and during admission into VII semester regarding research project.
- 4.2 All HEIs are required to upload the subjects available in their respective institutions with sanctioned strength on their websites.
- 4.3. Course Counselling Cell' has to be created in each HEI to provide proper information to students for admission on the available subjects in their respective institutions under U.G. programme.
- 4.4 A state level central counseling cell under SAMS shall be created to advise and regulate the college counseling cells for smooth functioning of the system.

5. Process of Admission:

5.1. The admission shall be made on merit on the basis of criteria to be notified by the University/Govt. of Odisha, keeping in view the guidelines/norms issued by the UGC/ concerned statutory bodies and taking into account the Reservation Policy issued by the Govt. of Odisha from time to time.

- 5.2. All admission are into three year degree progam only continuance to 4th year subject to clause 8.
- 5.3. Choice of core course during the admission in to 1st Degree Programme will determine the discipline of his/her studies and will be registered under the said discipline. For example, a student choosing Physics as 1st core during time of admission will be registered under science discipline. In case a particular core belongs to more than one discipline, the entry into the discipline will be on the basis of his second core subject. For example, a student is free to choose subjects from any faculty/discipline under Core-I, II and III. In other words, Core-I can be science stream while core-II can be Arts and Core-III can be from Commerce. This facilities is subject to the ability of the college to provide flexibility.

6. Registration of HEIs/Students:

- 6.1. All HEIs must be registered in National Academic Depositary (NAD) and upload required information from time to time.
- 6.2. Registration of students: All the students admitted into UG 1st semester be compulsorily registered to the universities through their respective institutions and also register for 1st Semester examination by depositing the required examination fees during the time of admission.
- 6.3. Students Registration with ABC: It is mandatory for all the students to registrar themselves with Academic Bank of credit and upload all required information.
- 6.4. The university and college shall facilitate ABC registration of the students centrally at the institution level.
- 6.5 During the beginning of the second semester, the students have to register for 2nd semester examination by depositing the required fees. However, for 2nd, 3rd and 4th year i.e., readmission into 3rd, 5th and 7th semester the students have to register for Term- end exam of both odd and even semesters by depositing required fees. Admission to examination will be subject to attendance, appearance of sessional and mid-semester examinations.
- 6.6 The HEI during the registration for final semester examination will collect fees for issue of the migration certificate prescribed by the concerned University and shall deposit the same with the University. After publication of final semester result migration certificate will be issued to all successful candidates along with their grade sheet.

7. Academic Bank of Credits (ABC):

Credit transfer shall be allowed in case the credit is registered under Academic Bank of Credits (ABC); a facility provided by UGC. The rules and regulations in this regard notified by UGC from time to time shall be applicable. All universities and Autonomous College shall join ABC, NAD and obtain Digi Locker as mandated by UGC. Every student including those of Affiliated College may also require to join ABC and obtain Digi Locker.

8. Duration and Types of Courses and Process of Multiple Entry and Exit:

Candidate has to complete the Three /Four years course within Seven Years from the date of admission. Under no circumstances, the candidate will be allowed to appear the backlog exam beyond the specific period.

Illustration: A candidate admitted in the academic year 2024-25 has to complete the programme by 2030-31 (On multiple exit and entry option under four/three-year programme, the candidate has to 2030-3. Some of the candidate has to enter himself/herself latest by 2029-30 or 2030-31 with completion of either two year or one year respectively).

Each semester shall comprise of 15 weeks of academic activities with a minimum of 90 working

day's.

8.1 The undergraduate programmes shall extend over four academic years (Eight Semesters) with multiple entry and exit options. The students can exit a course as follows:

i. Certificate Course- One academic year (First & Second Semesters and a Summer / Vocational Course and Community Work)

- ii. Diploma Course -Two academic years (First, Second, Third & Four Semesters and a Summer/Vocational Course and Community Work)
- iii. Three Year Degree Course with Single Major
- iv. Three Year Degree Course with Double Major
- v. Three Year Degree Course with Three Cores as Minor stream
- vi. Four Year Honours without Research with Major
- vii. Four Year Honours with Research

8.2 Awarding UG Certificate, UG Diploma, and Degrees:

- UG Certificate: Students who opt to exit after completion of the first year and have secured 44 credits will be awarded a UG certificate if, in addition, they complete one vocational course of 4 credits during the summer vacation of the first year (Table-I). These students are allowed to re-enter the degree programme within three years session of exit and complete the degree programme within the stipulated maximum period of seven years.
- 8.2.2 UG Diploma: Students who opt to exit after completion of the second year having secured 86 credits will be awarded the UG diploma if, in addition, they complete one vocational course of 4 credits during the summer vacation (Table-II). These students are allowed to re-enter within a period of three years and complete the degree programme within the maximum period of seven years.
- 8.2.3 3-year UG Degree: Students who wish to undergo a 3-year UG programme will be awarded UG Degree in the Major subject after successful completion of three years, securing at least 126 credits and satisfying the minimum credit requirement as given in the Table-III. The discipline or faculty shall be decided on the basis of the first Major, for example Physics major shall be under the B.Sc.
- 8.2.4 4-year UG Degree (Honours): A four-year UG Honours degree in the major discipline will be awarded to those who complete a four-year degree programme with at least 166 credits and have satisfied the credit requirements as given in Table-VI.
- 8.2.5 4-year UG Degree (Honours with Research): Students who secure 7.5 CGPA and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. They should do a research project or dissertation under the guidance of a faculty member of the institution who is a recognized Ph.D. Supervisor of the affiliating University or who holds a Ph.D. Degree. The research project/dissertation will be in the major discipline. The students, who secure 166 credits, including 12 credits from a research project/dissertation, are awarded UG Degree(Honours with Research) (Table-VII).

- The research work can be spread over both VII and VIII semester; however, the credit will be awarded in the Semester VIII.
- 8.2.6 UG Degree Programmes with Single Major: A student has to secure Credits as per credit requirement calculated in the Table-III with 126 credits.
- 8.2.7 UG Degree Programmes with Double Major: A student has to secure Credits as per credit requirement calculated in the Table -IV with 150 Credits
- 9. Eligibility for Award of Degree:

The university where a student has earned at least 60% of the Total Credit shall issue the certificate.

10. Types of Courses:

- 10.1 Major (Core-I) is the subject of main focus and the degree will be awarded in that discipline.
- 10.2 Minor Stream (Core-I, II, III) helps a student to gain a broader understanding beyond the major discipline. A students may gather 28 credits from a single subject.
- 10.3 Multidisciplinary UG Programmes (09 Credits): All UG students are required to undergo 3 introductory-level courses relating to any of the broad discipline/faculty offered by the University/College. These courses are intended to broaden the intellectual experience and form part of liberal U G courses. The University shall develop curriculum for multi-disciplinary courses. Students are to be encouraged to opt for courses outside their discipline/faculty. A basket of course under SEC in category of 3 credits shall be offered. A students has to complete 3 SEC courses as per table.
- 10.4 Ability Enhancement Courses (AEC) (08 Credits): Students are required to achieve competency in a Modern Indian Language (MIL) and in the English language with special emphasis on language and communication skills (not literally skill). Literature and Linguistic courses shall be offered in major core and minor stream. In lieu of odia, a student may be opt for only Sanskrit, Hindi or Urdu.
- 10.5 Skills Enhancement Courses (SEC) (09 Credits): These courses are aimed at imparting practical skills, hands-on training, soft skills, etc., to enhance the employability of students. A student has to opt the Skill Enhancement courses from the basket as per the subject available in the institution.

10.6 Value Added Courses (12 Credits)

- Environmental Studies and Disaster Management (03 Credits)shall be compulsory
- A basket of VAC shall be offered out of which a students will be required to opt for 3 as per table no.VI
- 10.6.1 For all value-added courses VTP Utkal University shall prepare video lectures and incase colleges are unable to hold classes, shall hold doubt clearing session. These courses shall have no internal component.
- 10.7 Summer Internship/Apprenticeship/Summer Project (04 Credits): Attempts have been made to provide internship as conceptualized in the Curriculum and Credit Frame Work by UGC. Till the Colleges/Universities are able to provide Internship/ Community work/ Field studies shall be offered in lieu of Internship.

- 10.8 Internship: A course requiring students to participate in a professional activity or work experience, or cooperative education activity with an entity external to the education institution, normally under the supervision of an expert of the given external entity. A key aspect of the internship is induction into actual work situations. Internships involve working with local industry, government or private organizations, business organizations, artists, crafts persons, and similar entities to provide opportunities for students to actively engage in on-site experiential learning.
- 10.8.1 Research Project/ Dissertation: Student of four-year Bachelor's Degree (Honours with Research) are required to take up Research Projects under the guidance of a faculty member. The students are expected to initiate the project work during seventh semester and complete the Research Project in the Eighth Semester. The Research outcome of their project work may be published in peer-reviewed journals or may be presented in conferences/ seminars or may be patented.
- 10.8.2 Studio activities: Studio activities involve the engagement of students in creative or artistic activities. Every student is engaged in performing a creative activity to obtain a specific outcome. Studio-based activities involve visual- or aesthetic- focused experiential work.
- 10.8.3 Field Practice/Projects: Courses requiring students to participate in field-based learning/projects generally under the supervision of an expert of the given external entity.
- 10.8.4 Community engagement and service: Courses requiring students to participate in field-based learning/projects generally under the supervision of an expert of the given external entity. The curricular component of 'community engagement and service' will involve activities that would expose students to the socio-economic issues in society so that the theoretical learning's can be supplemented by actual life experiences to generate solutions to real-life problems.
- 10.8.5 Seminar: A course requiring students to participate in structured discussion/conversation or debate focused on assigned tasks/readings, current or historical events, or shared experiences guided or led by an expert or qualified personnel in a field of learning, work/vocational, or professional practice.
- 10.9 Open Distance Learning (ODL): Student may be allowed to earn 40% of the course credit in a semester through online courses from SWAYAM (UGC)/IGNOU/OSOU/ DDCE (Utkal) etc. at their own cost and arrangement.
- 10.10 Vocational courses: In order to be eligible for Certificate/ Diploma, a student is required to earn 4 credits in vocational subjects during the summer vacation with 60 hours of Theory/ Laboratory/ Workshop at least within 15 days from the followings
 - Recognized ITI/ Poly Techniques providing a certificate to the effect that the candidate has completed 120 hours of vocational learning (Lab/ Workshop) in a specific trade.
- II. A vocational course provided under ODL platform (SWAYAM/ Odisha State Open University or any institution recognized by the regulatory authority).
- III. A vocational course offered by the HEI in a specific trade duly recognized by the Academic Council of the University concerned.
- IV. The student is required to pay additional fees for the purpose as specified by the course provider.

10.16 Besides B. A/B.Com and B.Sc., other Graduate Level course such as BBA, BCA. BSW, B.Lib Sc. etc. are to follow the broad credit structure. Further, Jagannath Sanskrit University and other Universities Offering Graduate Programme are also required to adopt the credit structure.

As all the above is linked with award of credits, the subject Experts Committee/BOS of Universities shall specify the structure.

Table-I: Structure for Certificate Courses: Exit after First Academic year [(One academic year (First & Second Semesters and a Summer/Vacational Course and Course

_{Sem} ester			Core-III	Multi- discipl inary	AEC	SEC	VAC	Community W Community Engagement & Services/ Field work /Internship	Total Mini mum Credit
1	2X4=8	1X4=4		1X3=3	1X4=4 Odia		1x3=3 Environment al Studies and Disaster management		22
п	2X4=8		1X4=4	1X3=3	1X4=4 English	1X3=3			22
Total	4x4=16	1X4=4	1X4=4	2x3=6	2x4=8	1X3=3	1X3=3		44

Vocational Course of 4 credits for Certificate

<u>Table-II:</u> Structure for Diploma Certificate Course Exit after Second Academic year [Two academic years (First, Second, Third & Four Semesters and a Summer Vocational Course and Community Work)]

mester	Core-1	Core-II	Core-III	Multi- discipli nary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Total Minimu m Credi
1	2X4=8	1X4=4		1X3=3	1X4=4 Odia		1x3=3 Environme ntal Studies and Disaster manageme nt		22
n	2X4=8		1X4=4	1X3=3	1X4=4 English	1X3=3			22
									44
Ш	3X4=12	1X4=4		1X3=3			1X3=3		22
IV	3X4=12		1X4=4					1x4=4	20
									42
Total	10x4=40	2x4=8	2x4=8	3x3=9	2x4=8	1X3=3	2x3=6	1x2=4	86

Core-II and Core-III are interchangeable.

<u>Table-III:</u> Three Year Degree Course with Single Major and Two Minor

enester	Core-I	Core- II	Core-III	Multi- discipli nary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Minim um Credit
1	2X4=8	1X4=4		1X3=3	1X4=4 Odia		1x3=3 Environment al Studies and Disaster management		22
11	2X4=8		1X4=4	1X3=3	1X4=4 English	1X3=3			22
			10						44
ш	3X4=12	1X4=4		1X3=3			1X3=3		22
IV	3X4=12		1X4=4					1x4=4	20
IV	7.00					-7-2			42
v	3X4=12	1X4=4				1x3=3	1x3=3		22
VI	2X4=8		1X4=4			1x3=3	1x3=3	- 4	18
	1	4							40
Total	15X4=60	3X4=12	2 3X4=12	3X3=9	2X4=8	3x3=9	4x3=12	1x4=4	126

In case a student opts for NCC and clears 'C' certificate additional 16 Credit shall be awarded and total credit shall be 126+16 = 142 Credit

<u>Table-IV</u>: Three Year Degree Course with Double Major

emester	Core-l	Core-II	Multi- discipli nary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Total Minimu m Credit
1	2X4=8	2X4=8	1X3=3	1X4=4 Odia		1x3=3 Environmental Studies and Disaster management		26
п	2X4=8	2X4=8	1X3=3	1X4=4 English	1X3=3	нанадениен		26
III	3X4=12	224.0						£2
***	304-14	2X4=8	1X3=3			1x3=3		52 26
IV	3X4=12	2X4=8					1x4=4	24
							77775170	4.9
	3X4=12	2X4=8						50
V		1100			1x3=3	1x3=3		26
VI	2X4=8	2X4=8			1x3≈3	1x3=3		22
								**
Total	15X4=60	12X4=48	3X3=9	2X4=8	22.0			48
		CAMBERNAMICS.	300000000000000000000000000000000000000	W/14-0	3x3=9	4x3=12	1x4=4	150

^{*}The BOS in each subject has to design a course for improving skill in their field.

**Principles of Management can be offered as an option.

Table-V: Three Year Degree Course with Three Core without Major

Semest er	Core-I	Core-II	Core-III	Multi- disciplin ary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Total Minimu m Credit
1	1X4=4	1X4=4	1X4=4	1X3=3	1X4=4 Odia		1x3=3 Environme ntal Studies and Disaster manageme nt		22
n	1X4=4	1X4=4	1X4=4	1X3=3	1X4=4	1x3=3			22
п	200000000000000000000000000000000000000				English				44
							1		22
Ш	2X4=8	1X4=4	1X4=4	1X3=3			1x3=3		8850
	1X4=4	2X4=8	1X4=4					1X4=4	20
IV									42
			2X4=8	1		1X3=3	1X3=3		22
	1X4=4	1X4=4	2A4=0			100000000	1 2000		10
V	4774 4	1X4=4	1X4=4			1X3=3	1x3=3		18
VI	1X4=4	134-4	133						
100	1								40
					1	2-2-0	4x3=12	1X4=4	126
Total	7X4=28	7X4=28	7X4=28	3X3=9	2X4=8	3x3=9	425-12	.400.50	

In case a student opts for NCC and clears 'C' certificate additional 16 Credit shall be awarded and total credit shall be 126+16 = 142 Credit

Table-VI: Fourth Year Hons. Without Research

mester	Core-I	Core- 11	Core-III	Multi- discipli nary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Total Minin um Credi
1	2X4=8	1X4=4		1X3=3	1X4=4 Odia		1x3=3 Environment al Studies and Disaster management		22
п	2X4=8		1X4=4	1X3=3	1X4=4 English	1X3=3			22
									44
III	3X4=12	1X4=4		1X3=3			1X3=3		22
IV	3X4=12		1X4=4					1x4=4	20
									42
v	3X4=12	1X4=4				1x3=3	1x3=3		22
VI	2X4=8		1X4=4			1x3=3	1x3=3		18
									40
VII	4x4=16	1x4=4	k.						20
VIII	4x4=16	1x4=4							20
									40
		5x4=2	20 3x4≈12						200,00

Table-VII: Fourth Year Hons. With Research

nester	Core-I	Core- II	Core-III	Multi- discipli nary	AEC	SEC	VAC	Community Engagement & Services/ Field work /Internship	Minim um Credit
1	2X4=8	1X4=4		1X3=3	1X4=4 Odia		1x3=3 Environment al Studies and Disaster management		22
11	2X4=8		1X4=4	1X3=3	1X4=4 English	1X3=3			22
									44
111	3X4=12	1X4=4		1X3=3			1X3=3		22
	3X4=12		1X4=4					1x4=4	20
IV									42
	3X4=12	1X4=4				1x3=3	1x3=3		22
v	2X4=8		1X4=4			1x3=3	1x3=3		18
VI									40
, ii					1				20
VII		2x4=8						Research	20
VIII	2x4=8							12	40
	14							16	166
Total	20x4=80	5x4=2	0 3x4=12	3x3=9	2x4=8	3x3=9	4x3=12	16	100

11. Process of Multiple Entry and Exit:

- 11.1 A student after completion of 1st academic Session with completion of 42 Credits and an additional 04 Credits in vocational stream can exit with a certificate issued by the HEI/University concerned. Such student can re -enter to the UG programmee into the 3rd semester within two years from award of his certificate.
- 11.2 A student after completion of 2nd year with 84 and an additional 4 credit in Vocational Stream can exit with a diploma. Such students can re-enter to UG programme in 5th semester within two years from award of this diploma.
- 11.3 Student who desires to undergo a 3-year degree programme will be allowed to exit after completion of 3rd year with minimum of 126/150 credits with a degree.
- 11.4 However, the total duration for completing the UG program shall not exceed 7 years from the admission into the 1st year Academic Session.
- 11.5 Students may acquire additional credit under Value added / Multi-Disciplinary / Swayam etc. The additional credit shall not be taken into account for Division/ Grade/ Rank etc. They shall not count for admission into higher program.

12. Subjects:

The core subjects that a candidate can choose under the Discipline Faculty of Arts, Commerce and

Science include the followin Faculty of SCIENCE	Faculty of ARTS	Faculty of COMMERCE & MANAGEMENT
Anthropology	English	Accountancy
liotechnology	Odia	Business Studies and Management
Botany	Hindi	Business Math and Statics
Chemistry	Sanskrit	Business Administration
Computer Science	AIHCA	Banking Finance and Insurance
Flectronics	Archaeology	Cost Accountancy
Environmental Science	Statistics	Company Law
Mathematics	Mathematics	Corporate Law
Geology	Political Science	Entrepreneurship
Geography	History	Finance
Microbiology	Economics	GST
Physics	Philosophy	Income Tax
Statistics	Linguistics	Indian Economy
Zoology	Public Administration	Marketing
Information Technology and Management	Sociology	Organisation Behaviour
Mathematics and Computing	Social Work	Operation Research
Economics	Gender Studies	
Education	Library & Information Science	
Home Science	Law	
Psychology	Tourism	
Linguistic	Rural Development	
Operation Research	Journalism/Journalism &Mass Communication	
Archaeology	PMIR (Personal Management & Industrial Relation)/IRPM (Industrial Relation & Personal Management	
	Urdu	

University may add to the list. The above list is illustrative not exhaustive

13. Twinning Courses pursuing simultaneous Dual Degree:

A student can pursue two academic programmes, one in full time **Physical Mode** and another in **Open and Distance Learning (ODL)**/online mode; or up to two ODL/Online programmes simultaneously, provided that in such, class timings for one programme do not overlap with the class timings of the other programme.

14. Level of Course:

The Board of Studies (BOS)/ subject experts while designing the course curriculum shall follow NCRF guideline as detailed below.

NCRF Level for different Academic Grades

Academic Band	Academic Grade	National Credit Frame Work Level
	UG- 1st year	4.5
4-year UG with Hons. /	UG- 2 nd year	5.0
Hons. With Research	UG- 3rd year	5.5
Program	UG- 4th year	6.0

Source- National Credit Framework (NCRF) Guideline March- 2023 (Table- 3)

15. Attendance and Change of Subject:

15.1 Attendance

- 15.1.1 A candidate shall be required to attend at least 75% of the lectures in a course in theory and practical classes taken separately.
- 15.1.2 The authorities may condone to the extent of 15% in exceptional cases i.e., serious illness & hospitalization, accident, mishap in the family or deputation by the college for any specific work for which the period of his/her absence shall not be counted towards the calculation of attendance on the condition that students concerned submit a certificate to that effect from the appropriate authority.
- 15.1.3 Absence to actual required days of attends Sports/NCC/NSS etc. activities shall be treated as presence for calculation of attendance. With prior permission of the Principal in case of college/Chairman PG Council in case of university
- 15.1.4 This clause shall not be applicable for Distance Education.
- 15.1.5 A candidate is also required to fulfill the above clauses for practical component.
- 15.2 Change of Subjects: A student can change his core (I) subject within 4 weeks of the last date of admission which has to be duly communicated to the University by the College Concerned. The choice of Core (Major/Minor) subjects during the first admission to the 3rd semester has to be exercised by the candidate after proper counselling by the college authorities through Course Counseling Cell.

18. Examination Pattern:

16.1 Medium of Examination

During registration for first semester examination, examinees will have to exercise their option for medium of examination (English/ Odia) which will be reflected in their final grade sheet/certificate. Provided that for a language subject answers are to be in that language. Sanskrit may be written in Odia script but language has to be Sanskrit.

However, excepting language subject all questions shall be in English / Odia and students are allowed to appear in the language opted by them during the registration for 1st semester examination.

16.2 Duration of the Examinations-Mid Semester & End Semester:

Duration of examination for all term End examination shall be for 3 hours and for all Mid Term examination for 1 hour irrespective of full marks in the course/subjects and irrespective of credit. The practical examinations shall be of 3 hours duration.

For Autonomous Colleges, each department shall have a designated Teacher in-charge of Examination to be decided by the principal in addition to the Controller of Examinations of the College. For non-autonomous college, the principal or the teacher nominated by the principal will be responsible for conducting examinations.

16.3 Continuous Evaluation and Mid Semester Examination:

- 16.3.1 Mid semester examination will be of 1-hour duration for 20/10 marks (20 for subjects having no practical and 10 for subject with practical papers). There shall be no pass mark in Mid Semester examination. The type of questions will be decided by the college authority (concerned Faculty member).
- 16.3.2 The Mid-Semester Examination shall be conducted and valued by the Teacher(s) who are teaching the corresponding paper or by any external faculty in the college(s). A student who fails to appear in a Mid-Semester Examination will be allowed one more chance to take the same examination before appearing the concerned term-end examination. There will be no provision to re-appear in the Mid-Semester Examination for improvement.
- 16.3.3 For subjects with practical there will be a Mid-Semester practical examination carrying 10 marks.
- 16.3.4 The College authority will preserve the answer script of the Mid Semester examination for 06 months from the date of publication of result of concerned semester for reference.
- 16.3.5 The College authority of the valuation zones/University authority will preserve the answer Script of the End Semester examination for 06 months from the date of publication of result for reference.
- 16.3.6 For ODL students, ODL Institutes shall frame its policy for Mid Semester examination.
- 16.3.7 A student has to appear the mid semester examination positively. Absence in the mid semester examination will be considered as fail however the candidate may be allowed to appear the mid semester examination before commencement of the concerned Term-End examination under special case duly considered by the institutional authorities (for the candidates who represent the University or State for Inter- University or inter-state competitions in Games and Sports or attending different recognized National level camps/ any critical medical case duly certified by the designated medical officer)

16.2 Distribution of Marks in Semester End and Continuous Evaluation:

(Irrespective of credit in a course/Paper)

Course Type	Maximum Marks	Semester- End theory Mark	Continues Evaluation Marks /Sessional	MILA	Semester-End and Practical mark	Mid Semester Practical Mark
Without	100	60	20	20		
Practical With Practical	100	50	10	10	20	10

16.3 Distribution of Sessional Marks:

College shall preserve all records of Sessional Examination.

Course Type	Maximum Mark	Mid Semester	Attendance		Surprise Test/Quiz	Assignment/ Presentation
Without Practical	40	20	Above 95%-	5 Marks	10	05
With Practical	30	(Theory 10 + Practical 10)=20	85%-94%-	4 Marks	05	Nil
A CONTROLLEY			75%-84%-	3 Marks		

17 Examination Question Pattern of Term End Examination:

The term end theory examination shall be for 100 marks of tree hour's duration, the weightage shall be 50 with practical and 60 without practical.

Question Pattern		With Practical	Without Practical
Part-I -Objective	Answer in MCQ /One word /Sentence. (All are Compulsory)	1x10=10	1x10=10
Part-II- Very Short Type	Answer maximum 50 words (All are Compulsory)	2x9=18	2x9=18
Part-III- Short Type	Answer maximum 250 words Answer any 8 out of 10 questions	5x8=40	5x8=40
Part-IV- Long Type	Answer maximum 800 words Answer any 4 out of 5 questions	8x4=32	8x4=32
P. D	Total	100	100
For Practical Paper		One Major Experiment-10 Record- 05 Viva voce-05	*******

18. Grading System:

Qualification	Grade	Mark Secured from 100	Grade Point	CGPA	Classification for Hons. (Applicable to 4yr Course only)	Classification for Pass
Outstanding	,O,	90-100	10	>=9.5	First Class Hons.	
Excellent	,V+,	80-89	9	>=8.5 - <9.5		
Very Good	,V,	70-79	8	>=7.5 - <8.5		
Good	'B+'	60-69	7	>=6.5 - <7.5		12334-1
Above Average	•В,	50-59	6	>=5.5 - <6.5	Second Class Hons.	Pass
Fair	.c.	45-49	5	>=5.0 - <5.5	110113.	
Pass	,D,	40-44	4	>=4.0 - <5.0		
Fail	.k.	Below 40	0	Below 4.0		Fail
Absent	'AB'	00	0			Fail
Malpractice	'M'	00	0			MP

N.B.

- A candidate has to secured Grade D or above to pass in each of the paper (Individually in Theory, Practical and Project)
- FAIL /MP/HARD CASE and Back Paper Clearance candidates in any Semester Examination are not eligible for award of Distinction.

CALCULATION OF GP, SGPA, CGPA AND PERCENTAGE OF MARK

A student's level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as: SGPA- Semester Grade Point Average, CGPA- Cumulative Grade Point Average

- a) Grade Point- Integer equivalent of each letter grade
- b) CREDIT- Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus.

CREDIT POINT: CREDIT x GRADE POINT for each course item

CREDIT INDEX: ECREDIT POINT of course items in each Semester

GRADE POINT AVERAGE= CREDIT INDEX
ECREDIT

Semester Grade Point Average (SGPA) = <u>CREDIT INDEX for each semester</u> \(\Sigma CREDIT | \)

Cumulative Grade Point Average (CGPA) =

CREDIT INDEX of all previous Semesters up to the 6th/8th Semester

ECREDIT

Case a: Equivalent Percentage of Mark= (CGPA-0.50) X10(for CGPA > 4.5 and CGPA ≤10)

Case b: Equivalent Percentage of Mark= CGPAX10 (for CGPA <4.5

19. HARD CASE RULE:

2% of the total as grace mark subject to maximum of 5 (five) marks in single paper shall be given to pass in a semester. This shall be applicable in each semester.

20. Disciplinary action against unfair means adopted in examinations:

A student adopting malpractice and/or showing any indiscipline behaviour, violating code of conduct [Which includes: Use of programmable calculators, mobile phones(except the paper in which it is asked to use such tools)/ smart watch (even in switch off mode), document or any electronic devices having memory chips, leaving the Examination Hall within the first hour from the commencement of the examination, talking to other examinees in the Examination Hall, trying to give any help to others or trying to seek any help from others inside or outside the Examination Hall, using question papers and/or answer scripts for communicating with fellow examinee, exchange of question papers and answer scripts with other examinees/outsiders, writing answers in question papers, writing obscene or filthy languages in answer scripts, taking away the answer scripts or any examination materials/papers to the outside of the examination hall without intimation/permission from the concerned authority of the examination etc.]

- a) Will be awarded "M" grade having 0(zero) Grade Point in the paper/papers concerned and he/she will be warned by the University with a copy to the parents/guardians or a notice in the official website of the University for the first offense.
- b) For repeated offense as described above in subsequent semester examinations in spite of the warning issued previously or grave misconduct despite warnings, he will be awarded "M" grade having 0(zero) Grade Point in all the papers of that examination and will be expelled from the college for one year.
- c) Any student found man-handling/threatening the officers/staff connected with the examinations (Invigilator, Centre Superintendent, Supervisors, Principal, Members of Flying squad, etc.) will be awarded "M" grade having 0(zero) Grade Point in all the papers of that Examination and will be expelled from the college for one year. Other disciplinary actions as deemed fit as per the Odisha conduct of examination Act-1988 or University first statute -1990 or IPC would be initiated by the University/college.

21. Re-Addition/Re-Checking and Un-Evaluated Portion:

- 21.1 A Student may apply through head of the Institution for Re-addition/Re-Checking of a paper within 15 calendar days from the date of publication of the results in each Semester by depositing prescribed fees. In case, there is any answer left unvalued, the same will be placed before the Board of Conducting Examiners of the respective subjects for valuation. The photocopy of answer scripts and information regarding re- addition of marks will be intimated to the candidate within 45 days.
- 21.2 There will be no re-evaluation processes of the answer scripts.
- 21.3 Re-Addition of Marks and Photo Copy of Answer Scripts:
 For Re-addition of marks and photo copy of the answer scripts, the candidate may apply for the same in the prescribed application form available in the college concern with application fees within 15 days from the date of publication of the result. Here, publication means the date on which the result of the particular candidate has actually been published.

- 21.4 For such purpose, all the Principals of the college are to provide prescribed application form of the University to the students of their college downloading from the website of the concerned Universities and receive the said application dully filled by the candidate with the prescribed fee within 15 days from the date of publication of the result.

 After completion of 15 days from the date of publication of the result, a list of applicants specifying Sl. No./Roll No./Subject-Paper/Name of the valuation zone for readdition/rechecking of marks or obtaining photo copies of answer scripts must be prepared valuation zone/collegewise and the same list to be send to the controller of examination of the concerned University along with the application fees received from the student as demand draft made in favor of the Comptroller of Finance or through electronic transfer (as applicable) of the concerned University within Seven working days from the last date of receiving such applications
- 21.5 Autonomous College/ University shall formulate their own Rules/ Regulation for Zonal/Central Valuation.

22. Evaluation Responsibility:

22.1 Scheme of Evaluation:

Scheme of evaluation has to be prepared by subject experts, preferably members of Board of Conducting Examiner for every paper and has to be supplied to the valuation zones by the Controller of Examination before evaluation.

22.2 Responsibility of Examiner

- 22.1.1 The concerned examiners are solely responsible for evaluation of Mid Semester, Practical and End Semester Examinations. He/She is also responsible for maintaining all records to justify his/her evaluation scheme and marks thereof.
- 22.1.2 Neither the Principal nor the Management of the college shall have the right/power to change the Mid Semester marks awarded by a teacher. However, if the principal is convinced that the Mid Semester marks awarded by a teacher are biased, he/she shall appoint a committee where the teacher concerned will be a member for review. The decision of the committee shall be final and binding. The decision with the revised marks shall be sent to the University for necessary Action.
- 22.1.3 Internal examiners for practical subjects should be appointed from among the teachers of the department eligible as per University statute on rotation basis and no single teacher be appointed for all the papers of a particular examination as far as possible.

23. University Registration Card:

Every student shall be issued a University Registration Card after admission. University Registration number continues to be his/her registration number for all examinations during his/her tenure of study. This card is also essential for admission of the student to a college and his/her eligibility to attend classes in a college. This is an IMPORTANT document and the student must possess it throughout his/her course under the University.

In the event of a student losing his/her University Registration Card, he/she should immediately lodge a FIR in the nearest Police Station. He/ She should apply through the College for issue of duplicate Registration Card with prescribed fee. The application form will be made available in the University counter/website. The application form accompanying the copy of FIR examinations, of the concerned by the concerned principal should be sent to the Controller of Examinations, of the concerned Universities by Speed Post/Registered Post/Email.

24. Uniform Fees & Uniform Transcript format:

- a) The Vice Chairperson, Odisha Higher Education Council shall constitute a committee for develop a uniform formats of Transcript (grade sheet), Migration certificate, Final degree certificate for approval of the appropriate authority.
- b) Similarly a committee shall be constituted to recommend a uniform admission, examination and other fees structure.

25. Credit Transmission for University to University:

As it is required in the present context when there is ABC and MOOCS, credit transfer from face to face to ODL and reverse shall be allowed. Each university shall have a committee for credit transfer as follows.

There should be a committee consisting of the following officials of the University to consider all cases of credit transfer:

1. Chairman, P.G. Council

2. Director, College Development Council

3 HODs of the Constituent dept.

4. Controller of Examinations

5. Deputy Controller of Examinations

Chairman

Member
 Members

Member

Member Convener

26. Concurrence/ affiliation to be Subject Specific:

Recognition/ affiliation granted and to be granted with number of seats shall be subject specific and not discipline specific.

Illustration: No of seats sanctioned in Home Science (or Mathematics) is transferable fully or partly between Arts and Science.

HEIs with recognition/affiliation in Zoology will not require further sanction in Microbiology as Minor Course provided total number of seats taken these two subjects taken together does not exceed the number of seats sanctioned in Zoology. Similarly for subjects like Sociology, Social Work and Gender Studies. Provided the HEI can teach Micro Biology/ Social work/Gender studies with the existing faculty in Zoology or Sociology as the case may be.

27. Award of Medals/Ranks:

Rank shall be awarded to the candidate on the basic highest secured CGPA by the Autonomous Colleges and Universities for affiliating colleges.

27.1 The Original Diploma/ Degree/ Mark Sheet/ Transcript shall carry security features, it shall also mention the Aadhar number of the degree holder. The best Graduate shall be decided by taking into account the results of all colleges (Auto/Non-Auto) Constituent Dept. of the University - from amongst 1st Major/Hons mark + Marks secured under other course heads but excluding Additional Credits / Summer Vocational Courses.

List of Multidisciplinary Courses for Model Curriculum

SI No.	Multidisciplinary Courses
1.	Medical Biotechnology and Molecular Diagnostics
2.	Bio resource Technologies and Bio Product
3.	Nano biotechnology
4.	Medical Biotechnology and Molecular Diagnostics
5.	Oceanography
6.	Climatology
7.	Geo Informatics
8.	Financial Literacy
9.	Indian Economy and Society
10.	Entrepreneurship Development
11.	Social Psychology
12.	Educational Psychology
13.	Health Psychology
14.	Vedic Culture
15.	Ethical Literature
16.	Bharatiya-Jnana-parampara (Indian Knowledge System)
17.	Philosophy of Bhagavad Gita
18.	Peace and Conflict Studies
19.	Basic of Public Administration
20.	Development Administration
21.	Public Policy
22.	Crime and Society
23.	Population and Society
24.	Science, Technology and Society
25.	Sociology for Social Workers
26.	Psychology for Social Workers
27.	Economics for Social Workers
28.	Law for Social Workers
29.	Anthropology for Social Workers
30.	Economics and F-Commerce
31.	Fundamentals of Entrepreneurship and E-Commerce
32.	Entrepreneurship Development and Start-up
33.	Business Model Innovation
34.	Vector Borne Diseases and Epidemiology Vector Borne Diseases and Epidemiology Vermitechnology / Apiculture / Sericulture / Lac Culture / Sustainable Eco- Vermitechnology / Apiculture / Sericulture / Lac Culture / Sustainable a College
35.	Vermitechnology /Apiculture/ Sericulture / Lac Culture / Sustainable a College tourism (Any one to be offered depending on the expertise available a College / University)

36.	Environmental Impact Assessment and Environmental Management plant (El and EMP)
37.	Environmental Microbiology
38.	Management of Human Microbial Diseases
39.	Bio fertilizers and Bio pesticides
40.	History of Science. Technology, and Medicine in India (HISTM)
41.	History of Environment and Ecology in Modern India
42.	History of Education in Modern India
43.	Gardening and Vermicomposting
44.	Herbarium Preparation
45.	Tissue Culture of Plants
46.	Physics
47.	Mathematics for Computer Science
48.	Operation Research
49.	Political Process in India
50.	Organisational Behaviour
51.	Elements of Economics
52.	Food and Nutrition Child Development
53.	Family Resource Management
54.	Hindi Sahityik Patrakarita
55.	Vigyapan: Abdharana Aur Prayojanmulak Aayam
56.	Hindi Sahitya Aur Cinema
57.	Gender, Environment and Climate Change
58.	Gender and Health
59.	Gender and Education
60.	Human Rights Education
61.	Environmental Education
62.	Historical Bases of Indian Education
63.	Educational Thinkers of Modern India
64.	Computer Fundamentals
65.	Introduction to Web Technologies
66.	Internet and Ethical Practices
67.	Nano Materials and Applications
68.	Bio Physics
69.	Introduction to Spectroscopy
70.	Environmental Issuer of the Control
71.	Environmental Issue and Challenges Waste Management
72.	Eco-Tourism
73.	Human Rights

74.	Gandhi and Ambedkar A Comparative e-Study
75.	
76.	Media and Information Literacy
77.	Media, Culture & Society
78.	Media, Conflicts and Disasters
	Principles of Human P
79.	Principles of Human Resource Management
80.	Steel Hallan Resource Management
81.	Corporate Social Responsibility
82.	Discrete Mathematics
83.	Linear Programming Problem
84.	Programming on C++
85.	Mathematical Modelling
86.	Mathematics Finance
87.	Numerical Methods
88.	Introduction Programming with MATLAB
89.	Introduction to Machine Learning
90.	Statistical Methods for Scientists and Engineers (Nptel)
91.	Survival Analysis and Biostatistics
92.	Applied Multivariate Statistical Modelling (Nptel)
93.	Probability and Stochastics For Finance (Nptel)
94.	Machine Learning
95.	Library and Society
96.	Management of Libraries
97.	Library Resources and Services
98.	Indian Knowledge System
99.	Media Literacy and Critical Thinking
100.	Indian Systems of Health and Wellness
101.	Biochemistry
102,	Environment all Chemistry
103.	Biophysical chemistry
104.	Tulanatmaka Sahitya
105.	Bijyan Bisaya O Sahitya
106.	Kala Bisaya O Sahitya
107.	Sustainable Tourism
108.	Demography/EIA
109.	Monitoring and Evaluation of Development Programs

List of Vocational Courses for Model Curriculum

SI No.	Vocational Courses					
1.	Geological Mapping and Cartography					
2.	Exportation Geochemistry					
3.	Education in Early Childhood					
4.	Psychological Testing					
5.	Applied Ethics- Medical Ethics and Laws					
6.	Applied Ethics-Cyber Ethics					
7.	Applied Ethics- Media Ethics and Laws					
8.	Social Impact Assessment Study					
9.	Cyber Law					
10.	Microbial world					
11.	Fundamentals of Horticulture					
12.	Plant Propagation					
13.	Applied Microbiology					
14.	Biotechnology and Instrumentation					
15.	Nursery Management					
16.	Environmental Microbiology					
17.	Environmental monitoring					
18.	Floriculture					
19.	Environmental conservation					
20.	Plant tissue culture					
21.	Management of Horticultural crops					
22.	Genetic Engineering					
23.	Cultivation of medicinal, aromatic and spice plant crops					
24.	Recombinant DNA technology					
25.	Genetic Transformation of Plants					
26.	Bioinformatics					
27.	Microbial Biotechnology					
28.	Biostatistics					
29.	Methods in molecular biology					
30.	Microbial world					
31.	Fundamentals of Horticulture					
32.	Plant Propagation					
33.	Applied Microbiology					
34.	Biotechnology and Instrumentation					
35.	Nursery Management					
36.	Environmental Microbiology					
37.	Environmental Monitoring					
38.	Floriculture					
39.	Environmental conservation					
40.	Plant tissue culture					

Value Added Courses under Model Curriculum

1. Environmental Studies & Disaster Management 2. Ethics and Values 3. Contemporary Cross Cutting Issues 4. Yoga for all 5. Understanding India 6. Understanding Odisha 7. Management Concepts and Practices 8. Operations Research 9. Organizational Behaviour 10. Research Methodology 11. Revised Indian Society 12. Anthropology Fieldwork Ethics 13. Museum Management 14. Molecular biology and Bioinformatics for the beginners 15. Anthropology Fieldwork Ethics 16. Bio analytical tool 17. Ethnophramacology 18. Integrated Omics 19. Molecular diagnostics 20. Geological Mapping & Cartography 21. Exploration Geochemistry 22. Education in Early Childhood 23. Psychological Testing 24. Karmakandam 25. Human Health and Yogie Science 26. Gandhian Applied Philosophy 27. Moral Dimensions of Environmental Issues 28. Kautilya's Philosophy and Political Thought 29. Social Statistics And Computer Applications 30. Climate Change and Disaster Risk Reduction 31. Digital Fluency 32. Intellectual Property Rights (IPR) 33. ProteinSeparationTechniques 34. MicrobesandEnvironment 35. BiodiversityandConservation	
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38. Food Preservation And Processing	
39. Geriatric Care And Management	
40. Ethical Practices and Education	
41. Economics of Education	
42. Basic understanding of Molecular Dynamic.	

43.	Conceptual understanding of statistical Mechanics
44.	Conceptual understanding of different input script in molecular dynamic (LAMMPS)
45.	Basic understanding of density functional theory
46.	Land degradation and desertification
47.	Creative Writing
48.	Environmental Journalism
49.	Sports Journalism
50.	Citizen Journalism
51.	Odia Journalism
52.	Corporate training and development
53.	Entrepreneurship and Start-up
54.	Scilab Scale-up
55.	Sagemath
56.	Maple
57.	Mathmetica
58.	Environmental Science and sustainability
59.	Indian Constitution
60.	Yoga/Sports/NCC/NSS/D:
61.	Yoga/Sports/NCC/NSS/Disaster Management Business environment and public policy or International Business or Geo Politics and impact on business or Public Health
62.	Geo Politics and impact on business or Public Health and management Nanomaterial and nanotechnology
63.	ଶ୍ରୀ ଜଗନ୍ନାଥ ସଂସ୍କୃତି
64.	ଆଦିବାସୀ ସଂସ୍କୃତି
65.	ଓଡ଼ିଶାର ସଂକୃତିକ ପର୍ଚ୍ଚରୟ

Skill Enhancement Courses under Model Curriculum

I No.	SEC
1.	Analytical Thinking and logical reasoning
2.	Introduction to statistics and data analyses
3.	Sports Anthropology
4.	Visual Anthropology
5.	Experimental Archaeology
6.	Scientific writing in Anthropology
7.	Forensic Anthropology
8.	Plant tissue culture/ Marine Biotechnology/ Computational Biology
9.	Mapping & Surveying
10.	Digital Cartography
11.	Data Analytics I
12.	Data Analytics II
13.	Understanding and Managing Self
14.	Psychological First Aid
15.	Computer Application
16.	Ayurveda and Vrksayurveda
17.	Yoga in everyday life
18.	Philosophical Counselling
19.	Personality Development
20.	Corporate Communication
21.	Carretorial Practices
22.	Sociology Of Disaster Resilience And Recovery
23.	Doing Ethnography
24.	Working with Individuals
25.	Working with Groups
26.	Working with Communities
27.	11 D. Aina
28.	Fundamentals of Data Science and Data Management
29.	m Deturn Filing
30.	Cinemaial Lechnology (1 in 1 con)
31.	Fermentation Technology and Industrial Enzymes
32.	Molecular Diagnostics
33.	E - 4 Formentation Techniques
34.	Microbial Diagnosis in Health Clinics
35.	Basics of Museum & Archives
36.	Historian's Craft
37.	Terjuma Nigari
38.	Urdu Sahafat
39.	Bio fertilizers
40.	Nursery & Gardening
41.	Soilless Cultivation

42.	Organic farming
43.	Ethno botany
44.	Mushroom Cultivation
45.	Tissue Culture & plant regeneration
46.	Vermicomposting
47.	Business Intelligence with Power BI
48.	VB,NET
49.	Hindi Anuprayog: Takaniki Sansadhan Evam Upakaran
50.	GenderSensitizationandResolvingGenderConflict
51.	Gender Entrepreneurial skill for Tourism and Hospitality
52.	Life skill education
53.	Peace education
54.	Art and Craft Education
55.	Computer Application in Teaching Learning Process
56.	Advanced Python Programming
57.	Principles of Management
58.	Renewable energy and energy harvesting
59.	Applied Optics and Photonics
60.	Monitoring Soil Quality
61.	Monitoring Water Quality
62.	Carbon footprint and water Footprint
63.	Political Journalism
64.	Election Studies and Public Opinion Poll
65.	Data Journalism
66.	Podcasting
67.	Project Management
68,	Time Management and Productivity Improvement
69.	Type setting in Latex
70.	Programing with Mathematics
71.	Introduction to Python
72.	Communication Skill for Library Professionals
73.	Online Search Strategies and Techniques
74.	Emerging Technologies and application
75.	Management Information System (MIS)
76.	Enterprise System and platforms
77.	Design Thinking and Innovation
78,	Computational chemistry
79.	Cosmetic and pharmacological chemistry
80.	Corrosion and Prevention
81.	ଅନୁବାଦ ସାହିତ୍ୟ
82.	ଗଣମାଧ୍ୟମ ଓ ଗଣଲଯାଗାଲଯାଗ
83.	Open Source GIS
84.	Principles of Management/ Qualitative Methods for Geographical Analysis

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How courses are selected

We map courses to your specific needs using our Skills Graph, an internal machine learning engine that matches skills to courses using data from our work with over 3,000 enterprise customers and 140+ million learners

We make recommendations based on topic relevance, skills learned, course popularity (enrollments), and course quality (star rating).

Degree	Topics	# of Courses
	Digital Marketing	8
	Data Analytics	11
BBM	Blockchain & FinTech	7
0.000	Entrepreneurship	10
	Sales	7
	Data Analytics	11
	Entrepreneurship	10
BSc	Artificial Intelligence	9
BSC	Programming	8
	Project Management	5
	Data Analytics	11
	Entrepreneurship	10
		9
BA	Career Skills	5
	Project Management	8
	Digital Marketing	4
	Tally Bookkeeper	11
	Data Analytics	7
BCom	Blockchain & FinTech	10
	Entrepreneurship	5
	Project Management	5
	Web Development	
Checomode II	Artificial Intelligence & Machine Learn	6
BCA	Cloud Computing	11
	Data Analytics	- 11

Branch	Topic	Semester	Semester wise 3- credits breakup	Course Name	University / Industry Partner Name	Learning Hours-by instructor	Specialism					
ВВМ	Digital Marketing	Semester 2	Foundation s of Digital Marketing –	Foundations of Digital Marketing and E-commerce	Google	18	Google Digita Marketing & E					
вам	Digital Marketing	Semester 2	1	Introduction to Social Media Marketing	Meta	33	Meta Social Media Marketir					
ввм	Digital Marketing Digital	Semester 3	Foundation s of Digital Marketing –	Attract and Engage Customers with Digital Marketing	Google	21	Google Digital Marketing & E					
ВВМ	Marketing Digital	Semester 3	II	From Likes to Leads: Interact with Customers Online	Google	27	Google Digital Marketing & E					
BBM	Marketing	Semester 4	Social Media	Social Media Management	Meta	25	Meta Social					
BBM	Digital Marketing Digital	Semester 4	Marketing	Developing a Marketing Mix for Growth	University of Illinois at Urbana-	13	Media Marketir Value Chain Management					
ВВМ	Marketing Digital	Semester 5	Advertising and Campaign	Fundamentals of Social Media Advertising	Champaign Meta	21	Meta Social Media Marketir					
	Marketing	Semester 5	Manageme nt	Advertising with Meta	Meta	23	Meta Social Media Marketin					
ВВМ	Data Analytics	Semester 2	Data Science Fundament als	Science Fundament	What is Data Science?	IBM	19	IBM Data Science; Introduction to Data Science; Key Technologies for Business; IBM AI				
ВВМ	Data Analytics	Semester 2		Tools for Data Science	IBM	18	Business IBM Data Science; Introduction to Data Science; Data Science Fundamentals with Python and					
ВВМ	Data Analytics	Semester 3		Data Analysis with Python	ІВМ	15	SQL IBM Data Science; IBM Data Analyst; Applied Data					
ВВМ	Data Analytics	Semester 3	Data Science Application s	Science Application	Science Application	Science Application	Science Application	Science Application	Data Visualization with R	IBM	12	Science IBM Data Analytics with Excel and R; Applied Data
ВВМ	Data Analytics	Semester 3		Predictive Modeling, Model Fitting, and Regression Analysis	University of California, Irvine	4	Data Science Fundamentals					

BBM	Data Analytics	Semester 3		Cluster Analysis, Association Mining, and Model Evaluation	University of California,	4	Data Science
Bbm	///			wodel Evaluation	Irvine	*	Fundamentals
ввм	Data Analytics	Semester 4	Business Analytics Foundation s – II	Introduction to Business Analytics: Communicating with Data	University of Illinois at Urbana- Champaign	16	Business Data Management and Communication; Business Analytics
ввм	Data Analytics	Semester 4	3-11	Tools for Exploratory Data Analysis in Business	University of Illinois at Urbana- Champaign	18	Business Analytics
ввм	Data Analytics	Semester 5	- 00000000	Fundamentals of Visualization with Tableau	University of California, Davis	11	Data Visualization with Tableau
ввм	Data Analytics	Semester 5	Visual Analytics and Reporting	Essential Design Principles for Tableau	University of California, Davis	13	Data Visualization with Tableau
BBM	Data Analytics	Semester 5		Visual Analytics with Tableau	University of California, Davis	9	Data Visualization with Tableau
BBM	Blockchain & FinTech	Semester 2	Blockchain Basics	Introduction to Blockchain Technologies	INSEAD	29	Blockchain Revolution
ВВМ	Blockchain & FinTech	Semester 3	Blockchain Application s - I	The Blockchain System	University of California, Irvine	12	Blockchain
ввм	Blockchain & FinTech	Semester 3	Blockchain Application	Blockchain: Foundations and Use Cases	ConsenSys Academy	10	No Specifization
BBM	Blockchain & FinTech	Semester 3	s - I Blockchain Application s - I	Blockchain Business Models	Duke University	12	Entrepreneurial Finance: Strategy and Innovation
ввм	Blockchain	Semester 4	Blockchain Application	Transacting on the Blockchain	INSEAD	30	Blockchain Revolution
ВВМ	& FinTech Blockchain & FinTech	Semester 5	s - II FinTech - I	FinTech Foundations and Overview	The Hong Kong University of Science and Technology	15	FinTech: Finance Industry Transformation and Regulation
вем	Blockchain & FinTech	I Semester D	FinTech - II	FinTech Risk Management	The Hong Kong University of Science and Technology	15	FinTech: Finance Industry Transformation and Regulation
ВВМ	Entreprene urship	Semester 2	The state of the s	Entrepreneurship I: Laying the Foundation	University of Illinois at Urbana- Champaign	18	Innovation: From Creativity to Entrepreneurshi
ВВМ	Entreprene urship	B Semester 2	Entreprene urship Basics	Entrepreneurship II: Preparing for Launch	University of Illinois at Urbana- Champaign	17	Innovation: From Creativity to Entrepreneurshi

BBA	Entreprer urship	Semester:	Financing	How to Finance and Grow You Startup – Without VC	University of London, London Business School	23	No Specifization
BBN	Entreprer urship	Semester 3	3	Business Model Innovation	HEC Paris	14	No Specilization
BBM	Entroprop	e Semester 4		Developing Innovative Ideas for New Companies: The First Step in Entrepreneurship	University of Maryland, College Park	8	Entrepreneursh p: Launching ar Innovative Business
BBM	Entreprend urship	Semester 4	Innovation	Innovation for Entrepreneurs: From Idea to Marketplace	University of Maryland, College Park	11	Entrepreneursh p: Launching ar Innovative Business
ВВМ	Entreprene urship	Semester 4		Strategic Innovation: Building and Sustaining Innovative Organizations	University of Illinois at Urbana- Champaign	15	Innovation: From Creativity to Entrepreneursh
BBM	Entreprene urship	Semester 5		Market Research and Consumer Behavior	IE Business School	6	Marketing Strategy
ВВМ	Entreprene urship	Semester 5	Market Research	Qualitative Research	University of California, Davis	15	Market Research
ВВМ	Entreprene urship	Semester 5		Quantitative Research	University of California, Davis	17	Market Research
ВВМ	Sales	Semester 2		Sales Training: Building Your Sales Career	HubSpot Academy	10	Sales Training for High Performing
ВВМ	Sales	Semester 2	Sales Fundament als	Sales Training: Techniques for a Human-Centric Sales Process	HubSpot Academy	15	Teams Sales Training for High Performing
ВВМ	Sales	Semester 2		Sales Training: Inbound Business Strategy	HubSpot Academy	12	Teams Sales Training for High Performing
ВВМ	Sales	Semester 3	Salesforce Basics - I	Opportunity Management in Salesforce	Pathstream, Salesforce	29	Teams Salesforce Sales
ВВМ	Sales		Salesforce Basics - II	Reports, Dashboards, and Customer Success in Salesforce	Pathstream, Salesforce	31	Operations Salesforce Sales
ввм	Sales	Semester 5	Sales	Sales Strategy	Fundação Instituto de Administraç	16	Operations Strategic Sales Management
ВВМ	Sales	Semester 5	Strategy	Sales & Marketing Alignment	ão Fundação Instituto de Administraç ão	16	Strategic Sales Management

BSc Recommendations

Branch	Topic		Semester wise 3- credits breakup	Course Name	University / Industry Partner	Learning Hours-by instructo
B.Sc.	Data Analytics	Semester 2	Data Science	What is Data Science?	Name IBM	19
B.Sc.	Data Analytics	Semester 2	Fundament als	Tools for Data Science	IBM	18
B.Sc.	Data Analytics	Semester 3		Data Analysis with Python	IBM	15
B.Sc.	Data Analytics	Semester 3		Data Visualization with R	IBM	12
B.Sc.	Data Analytics	Semester 3	Data Science Application s	Predictive Modeling, Model Fitting, and Regression Analysis	University of California, Irvine	4
B.Sc.	Data Analytics	Semester 3		Cluster Analysis, Association Mining, and Model Evaluation	University of California, Irvine	4
B.Sc.	Data Analytics	Semester 4	Business Analytics	Introduction to Business Analytics: Communicating with Data	University of Illinois at Urbana- Champaign	16
B.Sc.	Data Analytics	Semester 4	Foundation s – II	Tools for Exploratory Data Analysis in Business	University of Illinois at Urbana- Champaign	18
B.Sc.	Data Analytics	Semester 5		Fundamentals of Visualization with Tableau	University of California, Davis	11
B.Sc.	Data Analytics	Semester 5	Visual Analytics and Reporting	Essential Design Principles for Tableau	University of California, Davis	13
B.Sc.	Data Analytics	Semester 5	1000000000000	Visual Analytics with Tableau	University of California, Davis	- 9
B.Sc.	Entreprene urship	Semester 2	Entreprene	Entrepreneurship I: Laying the Foundation	University of Illinois at Urbana- Champaign	18
B.Sc.	Entreprene urship	Semester 2	- urship Basics	Entrepreneurship II: Preparing for Launch	University of Illinois at Urbana- Champaign	11/
B.Sc.	Entreprene urship	Semester 3	Financing	How to Finance and Grow Your Startup – Without VC	University of London, London Business School	23
B.Sc.	Entreprene urship	Semester 3		Business Model Innovation	HEC Paris	14

B.Sc	Programm ng	Semester 2	Drobless	Computational Thinking for Problem Solving	of Pennsylvani a	18
B.Sc	Programm	Semester 2	Programmi ng for	Problem Solving Using Computational Thinking	University of Michigan University	11
B.Sc.	Intelligence		Applied ML	Reinforcement Learning	IBM	32
B.Sc.	Artificial Intelligence	Semester 4	-1	Unsupervised Machine Learning	ІВМ	23
B.Sc.	Intelligence	Semester 4	Al & ML Algorithms	Supervised Machine Learning: Regression	IBM	21
B.Sc.	Artificial Intelligence	Semester 3	-1	Supervised Machine Learning: Classification	IBM	25
B.Sc.	Artificial Intelligence	Semester 3	Al & ML Algorithms	Introduction to Artificial Intelligence (AI)	IBM	8
B.Sc.	Artificial Intelligence	Semester 2		Prompt Engineering for ChatGPT	Vanderbilt University	19
B.Sc.	Artificial Intelligence	Semester 2	-wii /ii	Generative Al: Prompt Engineering Basics	IBM	7
B.Sc.	Artificial Intelligence	Semester 2	Gen Al	Generative Al: Introduction and Applications	IBM	6
B.Sc.	Artificial Intelligence	Semester 2		Generative Al for Everyone	DeepLearni ng.Al	6
B.Sc.	Entreprene urship	Semester 5		Quantitative Research	University of California, Davis	17
B.Sc.	Entreprene urship	Semester 5	Market Research	Qualitative Research	University of California, Davis	15
B.Sc.	Entreprene urship	Semester 5		Market Research and Consumer Behavior	IE Business School	6
B.Sc.	Entreprene urship	Semester 4		Strategic Innovation: Building and Sustaining Innovative Organizations	University of Illinois at Urbana- Champaign	15
B.Sc.	Entreprene urship	Semester 4	Innovation	Innovation for Entrepreneurs: From Idea to Marketplace	University of Maryland, College Park	11
S.Sc.	Entreprene urship	Semester 4		Developing Innovative Ideas for New Companies: The First Step in Entrepreneurship	University of Maryland, College Park	8

B.Sc.	Programmi ng	Semester 3	Object- Oriented Programmi	Object-Oriented Data Structures in C++	University of Illinois at Urbana- Champaign	21
B.Sc.	Programmi ng	Semester 3	ng using C++	C++ Object Basics: Functions, Recursion, and Objects	Codio	9
B.Sc.	Programmi ng	Semester 4	Introduction to Python	Programming for Everybody (Getting Started with Python)	University of Michigan	19
B.Sc.	Programmi ng	Semester 4	Programmi ng	Python Data Structures	University of Michigan	19
B.Sc.	Programmi ng	Semester 5	Java	Introduction to Java	LearnQuest	12
B.Sc.	Programmi ng	Semester 5	Programmi ng	Introduction to Object-Oriented Programming with Java	LearnQuest	17
B.Sc.	Project Manageme nt	Semester 2	Foundation s of Project Manageme nt	Google	18	
B.Sc.	Project Manageme nt	Semester 2	Project Initiation: Starting a Successful Project	Google	23	
B.Sc.	Project Manageme nt	Semester 3	Project Planning: Putting It All Together	Google	33	
B.Sc.	Project Manageme nt	Semester 4	Project Execution: Running the Project	Google	30	
B.Sc.	Project Manageme nt	Semester 5	Agile Project Manageme nt	Google	28	

BA Recommendations

Branch	Topic		Semeste r wise 3- credits breakup	Course Name	University / Industry Partner Name	Learning Hours-by instructo	The second second
ВА	Data Analytics	Semester 2	Data Science Fundam	What is Data Science?	IBM	19	IBM Data Science; Introduction to Data Science Key Technologies for Business; IBM AI Foundations for Business
ВА	Data Analytics	Semester 2	entals	Tools for Data Science	IBM	18	IBM Data Science; Introduction to Data Science Data Science Fundamentals with Python and SQL
ВА	Data Analytics	Semester 3		Data Analysis with Python	IBM	15	IBM Data Science; IBM Data Analyst; Applied Data Science
ВА	Data Analytics	Semester 3	Data Science Applicati	Data Visualization with R	IBM	12	IBM Data Analytics with Excel and R; Applied Data Science with R
ВА	Data Analytics	Semester 3	ons	Predictive Modeling, Model Fitting, and Regression Analysis	University of California, Irvine	4	Data Science Fundamentals
ВА	Data Analytics	Semester 3		Cluster Analysis, Association Mining, and Model Evaluation	University of California, Irvine	4	Data Science Fundamentals
ВА	Data Analytics	Semester 4	Business Analytics Foundati ons – II	Introduction to Business Analytics: Communicating with Data	University of Illinois at Urbana- Champaign	16	Business Data Management and Communicatio n; Business Analytics
ва	Data Analytics	Semester 4		Tools for Exploratory Data Analysis in Business	University of Illinois at Urbana- Champaign	18	Business Analytics

вА	Data Analytics	Semester 5	Visual -	Fundamentals of Visualization with Tableau	University of California, Davis	11	Data Visualization with Tableau
вА	Data Analytics	Semester 5	Analytics and Reportin	Essential Design Principles for Tableau	University of California, Davis	13	Data Visualization with Tableau
вА	Data Analytics	Semester 5	g	Visual Analytics with Tableau	University of California, Davis	9	Data Visualization with Tableau
ва	Entrepren eurship	Semester 2	Entrepre	Entrepreneurship I: Laying the Foundation	University of Illinois at Urbana- Champaign	18	Innovation: From Creativity to Entrepreneurs hip
ва	Entrepren eurship	Semester 2	neurship - Basics	Entrepreneurship II: Preparing for Launch	University of Illinois at Urbana- Champaign	17	Innovation: From Creativity to Entrepreneurs hip
BA	Entrepren eurship	Semester 3	Financin	How to Finance and Grow Your Startup – Without VC	University of London, London Business School	23	No Specilization
BA	Entrepren eurship	Semester 3	g	Business Model Innovation	HEC Paris	14	No Specilization
ВА	Entrepren eurship	Semester 4		Developing Innovative Ideas for New Companies: The First Step in Entrepreneurship	University of Maryland, College Park	8	Entrepreneurs hip: Launching an Innovative Business
BA	Entrepren eurship	Semester 4	Innovatio n	Innovation for Entrepreneurs: From Idea to Marketplace	University of Maryland, College Park	11	Entrepreneurs hip: Launching an Innovative Business
ВА	Entrepren	Semester 4		Strategic Innovation: Building and Sustaining Innovative Organizations	University	15	Innovation: From Creativity to Entrepreneurs hip
BA	Entreprer	Semester 5	Market Researc	Market Research and Consumer Behavior	IE Business School	6	Marketing Strategy
BA	Entreprer eurship		'n	Qualitative Research	University of California, Davis	15	Market Research
ВА	Entrepre	1 Sellicator	5	Quantitative Research	University of California, Davis	17	Market Research

BA	Career Skills	Semester 2		Generative Al for Everyone	DeepLearni ng.Al	6	No Specializatio
ВА	Career Skills	Semester 2		Generative AI: Introduction and Applications	IBM	6	IBM Generative A for Cybersecurity Professionals Generative A for Data Analysts; Generative A for Data Scientists; Generative A for Software Developers; Generative A Fundamentals ; AI Foundations for Everyone, IBM Applied
ВА	Career Skills	Semester 2	Gen Al Basics	Generative Al: Prompt Engineering Basics	IBM	7	IBM Generative Al for Cybersecurity Professionals: Generative Al for Data Analysts; Generative Al for Product Management; Generative Al for Data Scientists; Generative Al for Software Developers; Generative Al Fundamentals ; Al Foundations for Everyone; IBM Applied
ВА	Career Skills	Semester 2	0	Prompt Engineering for ChatGPT	Vanderbilt University	19	Al Prompt Engineering
ВА	Career Skills	Semester 3	Commun ication	Speak English Professionally: In Person, Online & On the Phone	Georgia Institute of Technology	16	Improve Your English Communicatio n Skills
ВА	Career Skills	Semester 3		Successful Presentation	University of Colorado Boulder	21	Effective Communicatio n; Writing, Design, and Presentation

ВА	Career Skills	Sen	nester 4	Personal Develop ment &		Macquarie University	18	Adapting: Career
ВА	Career Skills	Sen	mester 4	Growth	Adaptability and Resiliency	University of California,	9	Development Professional Skills for the Workplace
ва	Career Skills	Ser	mester 5	Negotiati on	Introduction to Negotiation: A Strategic Playbook for Becoming a Principled and Persuasive Negotiator	Yale University	33	No Specilization
BA	Project Managen ent	n Se	mester 2	Foundati ons of Project	Google	18		
BA	Project Manager ent	Still Branch	emester 2	Project Initiation: Starting a Successf	Google	23		
BA	Project Manage ent		emester 3	Project Planning: Putting It All	Google	33		
ВА	Project Manage ent		emester 4	Project Executio n: Running	Google	30		
BA	Projec		Semester 5	Agile	Google	28		1
BA	Digits	al s	Semester :	Foundati ons of Digital	Foundations of Digital Marketing and E- commerce	Google	18	Google Digital Marketing & commerce
ВА	Digit		Semester	Marketin q - I	Introduction to Social Media Marketing	Meta	33	Meta Social Media Marketing
BA	Dies	tal	Semester	Foundat 3 ons of Digital	Customers with Digital Marketing	Google	21	Google Digita Marketing & E commerce
В	A Digi		Semester	Marketin	From Likes to Leads: Interact with Customers Online	Google	27	Google Digita Marketing & E commerce Meta Social
8	A Dig	ital	Semester	4	Social Media Management	Meta	25	Media Marketing
-	BA Dig	gital	Semeste	Social Media Marketi	Developing a Marketing	University of Illinois at Urbana- Champaign	13	Value Chain Management
	BA Di	gital keting	Someste	Adverti	Media Advertising	-	21	Meta Social Media Marketing Meta Social
-	BA Di	gital ketin	Sameste	Campa n er 5 Manag ment	e Advertising with Meta	Meta	23	Media Marketing

BCom Recommendations

Branch	Topic		Semeste r wise 3- credits breakup	Course Name	University / Industry Partner Name	Learning Hours-by instructo r	Specialization
B.Com	Tally Bookkeep er	Semester 2	ion - I	Fundamentals of Accounting and Reporting	Tally Education	43	
B.Com	Tally Bookkeep er	Semester 3	Bookkee ping Certificat ion - II	Basics of Statutory Compliance and Taxation (1/2)	Tally Education	23	
B.Com	Tally Bookkeep er	Semester 4	Bookkee ping Certificat ion - II	Basics of Statutory Compliance and Taxation (2/2)	Tally Education	23	
B.Com	Tally Bookkeep er	Semester 5	Bookkee ping Certificat ion - III	Principles of Accounts Payable and Receivable Management	Tally Education	35	
B.Com	Data Analytics	Semester 2	Data Science Fundam	What is Data Science?	ІВМ	19	IBM Data Science; Introduction to Data Science; Key Technologies for Business; IBM AI Foundations for Business
B.Com	Data Analytics	Semester 2	entals	Tools for Data Science	IBM	18	IBM Data Science; Introduction to Data Science; Data Science Fundamentals with Python and SQL
B.Com	Data Analytics	Semester 3		Data Analysis with Python	IBM	15	IBM Data Science; IBM Data Analyst; Applied Data
B.Com	Data Analytics	Semester 3	Data Science Applicati ons	Data Visualization with R	IBM	12	Science IBM Data Analytics with Excel and R, Applied Data Science with R
B.Com	Data Analytics	Semester 3		Predictive Modeling, Model Fitting, and Regression Analysis	University of California, Irvine	-	Data Science fundamentals

	Data	Semester 3		Cluster Analysis, Association Mining, and Model Evaluation	University of California, Irvine	4	Data Science Fundamentals
	Analytics Data Analytics	Semester 4	Business Analytics Foundati	Introduction to Business Analytics: Communicating with Data	University of Illinois at Urbana- Champaign	16	Business Data Management and Communicatio n; Business Analytics
B.Com	Data Analytics	Semester 4	ons – II	Tools for Exploratory Data Analysis in Business	University of Illinois at Urbana- Champaign	18	Business Analytics
-		Semester 5		Fundamentals of Visualization with Tableau	University of California, Davis	11	Data Visualization with Tableau
B.Com	Data Analytics	Semester 5	Visual Analytics and Reportin	Essential Design Principles for Tableau	University of California, Davis	13	Data Visualization with Tableau
B.Com	Data Analytics	Semester 5	g	Visual Analytics with Tableau	University of California, Davis	9	Data Visualization with Tableau
B.Com	Blockchai n &	Semester 2	Blockcha in Basics	Dicontent	INSEAD	29	Blockchain Revolution
B.Com	FinTech Blockchai n &	Semester 3	Whiteen	The Blockchain System	University of California, Irvine	12	Blockchain
B.Com	FinTech Blockchai n &	Semester 3	ons - I Blockcha in Applicati	Blockchain: Foundations	ConsenSys Academy	10	No Specilization
B.Com	FinTech Blockchai n & FinTech	Semester	Blockcha in Applicat	Blockchain Business	Duke University	12	Entrepreneur al Finance: Strategy and Innovation
B.Com	Blockcha n & FinTech	Semester	Applica	Transacting on the	INSEAD	30	Blockchain Revolution
B.Com	Blockcha	ai Semester	ons - II	- FinTech Foundations and Overview	The Hong Kong University of Science and Technology	15	Finance Industry Transformati n and Regulation
B.Com	Blockch n & FinTec	Semester	5 FinTech	r - FinTech Risk Management	The Hong Kong University of Science and Technology	15	FinTech: Finance Industry Transformati n and Regulation

B.Com	Entreprer eurship	Semester 2	Entrepre	1	University of Illinois at Urbana- Champaign	18	Innovation: From Creativity to Entrepreneur hip
B.Com	Entrepren eurship	Semester 2	neurship Basics	Entrepreneurship II: Preparing for Launch	University of Illinois at Urbana- Champaign	17	Innovation: From Creativity to Entrepreneurs
B.Com	Entrepren eurship	Semester 3	Financin g	How to Finance and Grow Your Startup – Without VC	University of London, London Business School	23	No Specifization
B.Com	Entrepren eurship	Semester 3		Business Model Innovation	HEC Paris	14	No Specification
B.Com	Entrepren eurship	Semester 4		Developing Innovative Ideas for New Companies: The First Step in Entrepreneurship	University of Maryland, College Park	8	Entrepreneurs hip: Launching an Innovative Business
B.Com	Entrepren eurship	Semester 4	Innovatio n	Innovation for Entrepreneurs: From Idea to Marketplace	University of Maryland, College Park	11	Entrepreneurs hip: Launching an Innovative Business
B.Com	Entrepren eurship	Semester 4		Strategic Innovation: Building and Sustaining Innovative Organizations	University of Illinois at Urbana- Champaign	15	Innovation: From Creativity to Entrepreneurs hip
B.Com	Entrepren eurship	Semester 5		Market Research and Consumer Behavior	IE Business School	6	Marketing Strategy
B.Com	Entrepren eurship	Semester 5	Market Researc h	Qualitative Research	University of California, Davis	15	Market Research
B.Com	Entrepren eurship	Semester 5		Quantitative Research	University of California, Davis	17	Market Research
B.Com	Project Managem ent	Semester 2		Foundations of Project Management	Google	18	Google Project Management:; Google Project Management
B.Com	Project Managem ent	Semester 2		Project Initiation: Starting a Successful Project	Google	23	Google Project Management: Google Project Management

B.Com	Project Managem ent	Semester 3	Project Manage ment	Project Planning: Putting It All Together	Google	33	Google Project Management:; Google Project Management
B.Com	Project Managem ent	Semester 4		Project Execution: Running the Project	Google	30	Google Project Management:
B.Com	Project Managem ent	Semester 5		Agile Project Management	Google	28	Google Project Management:

BCA Recommendations

Branch	Topic		Semeste r wise 3- credits breakup	Course Name	University / Industry Partner Name	Learning Hours-by instructo r	Specialization
BCA	Web Develop ment	Semester 2	Front- End Web Develop ment	Programming Foundations with JavaScript, HTML and CSS	Duke University	33	Java Programming and Software Engineering Fundamentals
BCA	Web Develop ment	Semester 3	Back- End Web Develop ment	Introduction to MongoDB	MongoDB Inc.	15	No Specifization
BCA	Web Develop ment	Semester 3	Back- End Web Develop ment	Introduction to Structured Query Language (SQL)	University of Michigan	16	Web Applications for Everybody
BCA	Web Develop ment	Semester 4	Full- Stack Web Develop ment	Building Web Applications in PHP	University of Michigan	31	Web Applications for Everybody
BCA	Web Develop ment	Semester 5	101-1	Web Design; Wireframes to Prototypes	California Institute of the Arts	41	UI / UX Design
BCA	Artificial Intelligen ce & Machine Learning	Semester 2	AI & ML Algorith ms – I	Introduction to Artificial Intelligence (AI)	IBM	8	Al Foundations for Everyone; IBM Applied Al; IBM & Darden Digital Strategy; IBM Artificial Intelligence; Key Technologies for Business; IBM Al Foundations for Business
BCA	Artificial Intelligen ce & Machine Learning	Semester 2		Supervised Machine Learning: Classification	ІВМ	25	IBM Machine Learning; IBM Introduction to Machine
BCA	Artificial Intelligen ce & Machine Learning	Semester 3	Al & ML Algorith ms – I	Supervised Machine Learning: Regression	IBM	21	Learning IBM Machine Learning; IBM Introduction to Machine Learning

3CA	Artificial Intelligen ce & Machine Learning	Semester 3		Unsupervised Machine Learning	IBM	23	IBM Machine Learning; IBM Introduction to Machine Learning
3CA	Artificial Intelligen ce & Machine Learning	Semester 4	Applied ML	Deep Learning and Reinforcement Learning	IBM	32	IBM Machine Learning
BCA	Artificial Intelligen ce & Machine Learning	Semester 5	Neural Networks	Neural Networks and Deep Learning	DeepLeami ng.Al	25	Deep Learning
вса	Artificial Intelligen ce & Machine Learning	Semester 5	Neural Networks	Introduction to Deep Learning & Neural Networks with Keras	IBM	8	IBM AI Engineering: IBM Artificial Intelligence
BCA	Cloud Computi g	n Semester 2	Cloud Comput ng Basics -	Computing	IBM	24	IBM and ISC2 Cybersecurity Specialist; Cloud Application Development Foundations; IBM IT Support; IBM DevOps and Software Engineering; Information Technology (IT) and Cloud Fundamentals; IBM Full Stack Software Developer; IBM & Darden Digita Strategy; DevOps, Cloud, and Agile Foundations; Key Technologies fo Business
BCA	Cloud Compu	tin Semester	Cloud Compu 2 ng Basics	Cloud Computing Basics (Cloud 101)	LearnQuest	9	No Specilization

BCA	Cloud Computin g	Semester 3	Cloud Applicati ons - I	Cloud Computing Applications, Part 1: Cloud Systems and Infrastructure	University of Illinois at Urbana- Champaign	15	Cloud Computing
BCA	Cloud Computin g	Semester 3	Cloud Applicati ons - II	Cloud Computing Applications, Part 2: Big Data and Applications in the Cloud	University of Illinois at Urbana- Champaign	20	Cloud Computing
BCA	g	Semester 4	Cloud Applicati ons - III	Application Development using Microservices and Serverless	IBM	24	IBM Back-end JavaScript Developer; IBM Full-Stack JavaScript Developer; IBM Back-End Development; IBM Applied DevOps Engineering; IBM DevOps and Software Engineering; IBM Full Stack Software Developer; Applied Cloud Development
BCA	Cloud Computin g	Semester 5	Cloud APIs	Cloud Virtualization, Containers and APIs	Duke University	31	Building Cloud Computing Solutions at Scale
BCA	Data Analytics	Semester 2	Data Science Fundam entals	What is Data Science?	IBM	19	- IBM Data Science; Introduction to Data Science; Key Technologies for Business; IBM Al Foundations for Business
BCA	Data Analytics	Semester 2		Tools for Data Science	IBM	18	IBM Data Science; Introduction to Data Science; Data Science Fundamentals with Python and SQL

вса	Data Analytics	Semester 3		Data Analysis with Python	IBM	15	IBM Data Science; IBM Data Analyst; Applied Data Science	
BCA	Data Analytics	Semester 3	Data Science Applicati ons	Science	Data Visualization with R	IBM	12	IBM Data Analytics with Excel and R; Applied Data Science with R
BCA	Data Analytics	Semester 3		Predictive Modeling. Model Fitting, and Regression Analysis	University of California, Irvine	4	Data Science Fundamentals	
BCA	Data Analytics	Semester 3		Cluster Analysis, Association Mining, and Model Evaluation	University of California, Irvine	4	Data Science Fundamentals	
BCA	Data Analytics	Semester 4	Business Analytics Foundati	Data	University of Illinois at Urbana- Champaign	16	Business Data Management and Communication Business Analytics	
BCA	Data Analytics	Semester 4	ons – II	Tools for Exploratory Data Analysis in Business	University of Illinois at Urbana- Champaign	18	Business Analytics	
BCA	Data Analytics	Semester 5		Fundamentals of Visualization with Tableau	University of California, Davis	11	Data Visualization with Tableau	
BCA	Data Analytics	Semester 5	Visual Analytics and Reportin	Principles for Tableau	University of California, Davis	13	Data Visualization with Tableau	
BCA	Data Analytics	Semester 5	g	Visual Analytics with Tableau	University of California, Davis	9	Data Visualization with Tableau	

Job- Ready Pathway Examples

Learnir g Progra m	Course	University / Industry Partner Name	Type of Content	Avg Total Learning Hours	Specialization	Domain
	The Science of Well- Being	Yale University	Course	13.64	No Specialization	Personal Development
GAININ G CONFID ENCE	The Science of Success: What Researchers Know that You Should Know	University of	Course	7.16	No Specialization	Business
	Mindshift: Break Through Obstacles to Learning and Discover Your Hidden Potential	University	Course	10.05	No Specialization	Personal Development
101	Urgent Optimism: How to Turn Foresight into Action	Institute for the Future	Course	3.66	Futures Thinking	Business
	Negotiation Skills and Effective Communicat ion	Tecnológico de Monterrey	Course	4.07	Leadership and Negotiation Skills	Business
	Adaptability and Resiliency	University of California, Davis	Course	2.5	Professional Skills for the Workplace	Business
	Ready, Set, Future! Introduction to Futures Thinking	Institute for the Future	Course	8.39	Futures Thinking	Business
ADAPT ABILITY	Build personal resilience	Macquarie University	Course	6.57	Adapting: Career	Business
	Positive Psychology: Resilience Skills	University of Pennsylvania	Course	9.93	Foundations of Positive Psychology	Health
	The Growth Mindset	University of California, Davis	Course	3.37	Professional Skills for the	Business
	Strategic Planning and Execution	University of Virginia	Course	6.67	Workplace Business Strategy	Business

	Lilling.	Iniversity of California, C Irvine	Course	2.65	Career Success	Business
ANNI NG	Implementin g Connected Planning	Anaplan	Course	NOT CALIBRATED	Connected Planning for Business Transformation	Business
	Project Planning: Putting It All Together	Google	Course	12.51	Google Project Management:; Google Project Management	Business
	Personal Leadership Developmen t Planning and Leading High Performing	Rice University	Course	5.93	Leadership Development for Engineers	Business
	CAREER DE	VELOPMENT				CAREER DEVELOPMENT
	Be Your Best Creative Self	University of Colorado Boulder	Course	3.77	Effective Communicatio n: Personal Development for Professional Success	Business
	Career planning: Your career, your life	Macquarie University	Course	4.12	Adapting: Career Development	Business
	Career Options: Exploring a New Caree		Course	4.99	Career Discovery	Personal Developmen
	Successful Career Developme	University System of	Course	5.03	Career Discovery	Personal Developmen
CAR	Career Developme	University of		17.77	No Specialization	Language Learning
EF	Career Decisions From Insig	ht University	Course	9.08	No Specialization	Personal Developmen

BRANDI		University of Edinburgh	Course	3.71	No Specialization	Personal Development
PERSO NAL	Strategic Career Self- Management Digital	The State University of New York The	Course	11.15	Career Self- Management Training and Certification	Personal Development
	Build a Better LinkedIn Profile	Coursera Project Network	Guided Project	0.59	No Specialization	Business
	Winning Resumes and Cover Letters 5 Ways to	University of Maryland, College Park	Course	6.76	Interviewing and Resume Writing in English	Business
	Build Your Professional ePortfolio in English Writing	Georgia Institute of Technology	Course	5.71	Improve Your English Communicatio n Skills	Language Learning
cv	Create a Resume and Cover Letter with Google Docs	Coursera Project Network	Guided Project	1.04	No Specialization	Business
BUILD	How to Write a Resume (Project- Centered Course)	The State University of New York	Course	1.75	No Specialization	Personal Development
	Build a Professional Resume using Canva	Coursera Project Network	Guided Project	0.62	No Specialization	Personal Development
	Create a Profile and Network on LinkedIn	Coursera Project Network	Guided Project	1.05	No Specialization	Business
	Essential Skills for Your Career Developmen	University of Leeds	Course	1.59	No Specialization	Personal Developmen
	Become a changemake r, build a career with purpose and impact	HEC Paris, Ticket for Change	Course	4	No Specialization	Business
	Professional development : Improve yourself, always	Macquarie University	Course	6.57	Adapting: Career Development	Business

140	Strategic Self-	The Pres			Career Self-	
	1000	The State University of New York	Course	4.45	Management Training and Certification	Personal Development
	Introduction to Personal Branding	University of Virginia	Course	3.4	No Specialization	Personal Development
	JOB SE	The state of the s				JOB SEARCH
	Learn to Job Search with Indeed	Coursera Project Network	Guided Project	0.55	No Specialization	Business
FINDIN G EMPLO YMENT	Utilize LinkedIn for Career Search	Coursera Project Network	Guided Project	0.66	No Specialization	Business
	Job Success: Get Hired or Promoted in 3 Steps	The State University of New York	Course	3.38	No Specialization	Personal Development
	I Planning: A	University System of Georgia	Course	6.15	Career Discovery	Personal Development
	Utilize CareerBuilde r to Find Employment	Network	Guided Project	0.34	No Specialization	Business
	Interview Research and Preparation	University of Maryland, College Park	Course	10.19	Interviewing and Resume Writing in English	Business
	Preparation for Job	Coursera Project Network	Guided Project	0.51	No Specialization	Personal Development
	Successful Interviewing	University of Maryland,	Course	8.01	Interviewing and Resume Writing in English	Language Learning
Intervi	Advanced Interviewing Techniques	100	Course	7.08	Interviewing and Resume Writing in English	Language Learning
	Departure	Network	Guided Project	0.35	No Specialization	Personal Development
	Accomplishment STAF Technique for Job Interviews	Coursera Project Network	Guided Project	0.08	No Specialization	Personal Development

	The Art of the Job Interview	Big Interview	Course	3.9	No Specialization	Business
	Strategically Build and Engage You Network on LinkedIn	Coursera r Project	Guided Project	0.63	No Specialization	
NETWO RKING	Establishing a Professional Self through Effective Intercultural Communicat	National University of Singapore	Course	5.83	Effective Communicatio n in the Globalised Workplace	Personal Developmen
	Strengthenin g Your Widening Network	National University of Singapore	Course	3.56	Effective Communicatio n in the Globalised Workplace	Personal Developmen
	Emotional and Social Intelligence	University of California, Davis	Course	3.24	Professional Skills for the	Business
	The Arts and Science of Relationship s: Understandi ng Human Needs	University of Toronto	Course	15.15	No Specialization	Personal Development
	JOB SI	UCCESS				JOB
	Introduction to Computers and Office Productivity Software	The Hong Kong University of Science and Technology	Course	4.34	No Specialization	Computer Science
	Google Calendar	Google Cloud	Course	1.24	Getting started with Google Workspace	Information Technology
	Google Drive	Google Cloud	Course	1.22	Getting started with Google Workspace	Information Technology
OFFICE PRODU	Google Docs	Google Cloud	Course	1.08	With Goodle	Information Technology
TOOLS	Google Sheets	Google Cloud	Course	1.56	I WITH LACKSCHIP I	Information Technology

c	communicat ions with Slack	1 TORGET	Guided Project	0.6	No Specialization	Business
·	Spreadsheet s for Beginners using Google Sheets	Coursera Project Network	Guided Project	2.19	No Specialization	Business
	Collaboratin g with G Suite Apps	Coursera Project Network	Guided Project	0.63	No Specialization	Business
	Create Informative Presentation s with Google Slides	Coursera Project Network	Guided Project	0.53	No Specialization	Business
	Speaking and Presenting: Pitches and Persuasion	University of Michigan	Course	2.18	Good with Words: Speaking and Presenting	Personal Development
	Storytelling and influencing: Communicat e with	Macquarie University	Course	6.25	Influencing: Storytelling, Change Management and Governance	Business
COMMU	Presentation s: Speaking so that People	University of California, Irvine	Course	12.06	Learn English: Advanced Academic Speaking and Listening	Language Learning
NICATI ON (Preser tation/\ erbal)	Engaging in Persuasive and Credible Communicat	National University of Singapore	f Course	4.57	Effective Communicatio n in the Globalised Workplace	Personal Development
erbaij	Becoming Part of the Globalised Workplace	National University o Singapore		4.15	Effective Communicatio n in the Globalised Workplace	Personal Development
	Communication in the 21st Century Workplace	California,	CONTRACTOR OF STREET	2.59	Career Success	Business
	Understand ng Corporat Communications	e Starweave	r Course	1.48	No Specialization	Business

RESPO NDING	Write Professional Emails in English	Georgia Institute of Technology	Course	8.37	Improve Your English Communicatio	Language Learning
	English Professionall y: In Person, Online & On the Phone	Georgia Institute of Technology	Course	10.23	Improve Your English Communicatio n Skills	Language Learning
	to Power BI Speak	Accelerators	Course	4.08	No Specialization	Information Technology
	to Data Analysis Using Excel From Excel	Rice University Knowledge	Course	9.41	Business Statistics and Analysis	Data Science
	Excel Basics for Data Analysis	IBM	Course	7.62	IBM Business Intelligence (BI) Analyst; IBM Data Analyst; IBM Data Analytics with Excel and R; Data Analysis and Visualization Foundations	Data Science
MS EXCE PYTH N (Dat	Fundamenta o s for Data	Macquarie University	Course	12.33	Excel Skills for Data Analytics and Visualization	Business
Tapaget 1	for Business Intermediate	Macquarie	Course	16.84	Excel Skills for Business	Business
	Data Analysis Using Python Excel Skills	University of Pennsylvania	Course	10.61	Introduction to Programming with Python and Java	Data Science
	Processing using Pythor Collections	Project	Guided Project	0.71	No Specialization	
	Everyday Excel, Part	University of Colorado Boulder	Course	11.19	Everyday Excel	Computer Science
	Create Informative Presentation s with Microsoft PowerPoint	Project Network	Guided Project	0.42	No Specialization	Business

PHONE	Communicat ion in the 21st Century Workplace	University of California, Irvine	Course	2.59	Career Success	Business
	High-Impact Business Writing	University of California, Irvine	Course	3.61	Career Success; Project Management & Other Tools for Career Development	Business
FU	TURE PROOF	ING YOURSE	LF			FUTURE PROOFING YOURSELF
LIFELO NG LEARN NG	Training and Learning Online	University of Leeds	Course	1.47	No Specialization	Personal Development
	Introduction to Learning Transfer and Life Long Learning (3L)	University of California, Irvine	Course	2.82	No Specialization	Business
	e-Learning Ecologies: Innovative Approaches to Teaching and Learning for the Digital Age	University of Illinois at Urbana- Champaign	Course	9.07	No Specialization	Social Sciences
	Team	University of Pennsylvania	Course	4.8	Culture-Driven Team Building	Business
	Exploring Emerging Technologie s for Lifelong Learning and Success	New York	Course	4.18	No Specialization	Personal Development
	Learning How to Learn: Powerful mental tool to help you master toug subjects	1	Course	11.64	No Specialization	Personal Developmen

PROBL EM SOLVIN G	How to Jumpstart Your Hidden Creative Genius	Michigan State University	Course	3,15	No Specialization	Personal Development
	Effective Problem- Solving and Decision- Making	University of California, Irvine	Course	2.34	Career Success; Project Management & Other Tools for Career Development	Business
	Methods for Solving Problems	University of Colorado Boulder	Course	4.36	Mind and Machine	Computer Science
	Creative Problem Solving	University of Minnesota	Course	4.89	No Specialization	Personal Development
	Analysing Complexity	Macquarie University	Course	9.72	Solving Complex Problems	Business
	Evaluating Problems	Macquarie University	Course	8.59	Solving Complex Problems	Business
COLLA BORATI ON	Collaborativ e Foresight: How to Game the Future	Institute for the Future	Course	5.01	Futures Thinking	Business
	Creativity Toolkit II: Creative Collaboratio	University of Illinois at Urbana- Champaign	Course	7.73	Innovation: From Creativity to Entrepreneursh ip	Business
	High Performance Collaboratio n: Leadership, Teamwork, and Negotiation	Northwestern University	Course	9.8	Organizational Leadership	Business
	Conflict Resolution Skills	University of California, Irvine	Course	4.77	Conflict Management	Business
	The Power of Team Culture	University of Pennsylvania	Course	4.9	Culture-Driven Team Building	Business
	Building High- Performing Teams	University of Pennsylvania	Course	8.9	Culture-Driven Team Building	Business
	Teamwork Skills: Communicat ing Effectively in Groups	University of Colorado Boulder	Course	7.55	No Specialization	Business