#### **CRITERION I: CURRICULAR ASPECTS**

# 1.1 Curriculum Design and Development

1.1.1 How is the Institutional vision and mission reflected in the academic programs of the university?

University's academic programmes reflect the vision to emerge as a premier higher learning institution by creating, advancing and disseminating knowledge and mission of educating and empowering the learners to realize their potential through righteous blending of knowledge, skills, and values.

The University functions and strives for excellence in teaching by methodical course and curriculum development, continuous improvement in course delivery and setting appropriate learning outcomes.

University has developed number of educational courses which are aimed at employability, encourages research and innovations, and developing competencies, and which promote multidisciplinary scholarship.

University offers a wide spectrum and choices of academic programmes that includes Education, Science, Engineering, Management, Computer Sciences, Information Technology, Life Sciences, Bio-technology, Bio-informatics, Laser Technology, Chemical Sciences, Commerce, Economics, Social Sciences, Languages, Electronic Media, Mass Media and Journalism.

Theory, practical and projects are integral part of the curriculum which is being facilitated by diverse and technology enabled learning environment to students for joyful learning.

The curriculum acknowledges the existence of multiple legitimate knowledge frameworks in the global population and continuously strives to incorporate indigenous perspectives, and develop intercultural understanding.

University christened Faculty for Engineering Sciences in 1989 which offers new academic programmes in emerging areas which blend engineering and sciences.

University has number of academic programmes in management studies viz. Tourism, International Business, Advertising and Public relations. University is along with the select few Universities first to introduce the following courses: MCA (1986); M.Sc. (Computer Science) (1987) and M. Sc. Electronics (1990). University is perhaps first to plan and design innovative curriculums and introduce the following courses in the Country for the first time:

M. Tech. Computer Science (1992), M. Tech. (Energy Management) (1992), M. Tech. Future Studies and Planning (1992), M.S. Instrumentation (1992) [later recognised by AICTE as M.Tech. Instrumentation (1998)], M.C.A. Integrated 6 years (1992), MBA (International Business) (1992), M.B.A. Integrated 5 years (Management Science) (1992), M. Tech. Laser Sc. & App., (1993), M.B.A. Integrated course (Hospital Administration) (1995), M. Tech.

Embedded Systems (2002), M.Sc. (Electronic Media)- 5 yrs. Integrated Course (2002), Integrated M. Tech. in Information Technology (2002), MBA (Financial Services) (2004), MBA (Media Management) at Electronic Media Research Centres (2006), M. Tech. Spatial Information Technology (2007), M. Tech. Mobile Computing Technology (2008), M. Tech. (Network Management & Information Security) (2008), M. Tech (Software Engg. & Information Architecture) (2008).

University Curriculum design process also takes into account diversity amongst the students in terms of their previous educational experiences.

The curriculum incorporates a blended learning pedagogy which utilizes a wide range of strategies including virtual learning environments and other technological innovations.

Students are encouraged to participate in a range of co-curricular learning opportunities that include mentoring programs, and service learning.

1.1.2 Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).

Yes, University follows a systematic process in the design and development of the curriculum for the University Teaching Departments (UTDs) and affiliated colleges. All curriculum development processes are controlled by statutory bodies. Also at the same time the suggestions of subject experts, students and stakeholders are also taken into consideration, while updating the curricula in all the school of studies.

## **University School of Studies**

University Ordinance no. 31 is in operation since 1990which is modeled on the pattern followed in Indian Institute of Technologies. It empowers the Schools/Institutes to modify the curriculum, courses and syllabus continuously under the overall control of the Board of Studies. It provides academic autonomy to the teaching departments in curriculum design as well as teaching-learning and evaluation processes.

#### **Need Assessment**

The demand scenario of employment, industrial jobs and need of research in new emerging areas are the guiding principles to revise the curriculum or start a new course or School of Studies or Institute.

University assesses the need of new academic programmes or revision in the existing academic programmes through interactions with experts, feedback of students and stake holders.

The students' feedback is taken and analyzed regularly at the end of the semester for each paper taught. The alumni provide feedback whenever they observe need of new skills driven by the market. The faculty members interact with the placement companies to know their fresh requirements of knowledge

and skills. Need assessment indicates the need of new academic programme or revision in the existing curriculum. The university also considers latest research and technologies in the relevant field of studies in revision of the concerned courses.

# Design and Development of curriculum and Faculty involved in Ccurriculum design

The design and development of curriculum in UTDs is carried out as per Ordinance 31 of the university. As per the Ordinance, the UTDs are responsible for instituting, planning, monitoring, assessing and modifying their academic programmes. It also provides academic autonomy to the teaching departments in curriculum design as well as teaching-learning and evaluation processes. Faculty members take guidance from the academic peers, interact with subject experts and revise the contents of existing curriculum or design a new curriculum as per the need assessment on the curriculum. School/Institute discusses and takes the appropriate decisions keeping in view the feedbacks and suggestions.

Curriculum design process also keep in focus the syllabi for the National Eligibility Tests, GATE, NET, Service Commissions, and guidelines of guidelines of National regulatory authorities such as UGC, ICSSR, NCTE, MCI, DCI, AICTE.

New academic programmes are instituted after approval of the different academic statutory bodies like Board of Studies, Faculty, Academic Council, Executive Council and finally by the Co-ordination Committee. The existing programmes are modified by the UTD and approved by the department committee or Board of Studies.

## **Affiliated Colleges**

All affiliated colleges PG and UG syllabi are ought to be approved by a Board of Studies. The Board has members- all Professors, two Readers, two Lecturers, two external experts and one student member. Board of Studies enrich the curriculum and encourage skill development and need based programmes.

1.1.3 How are the following aspects ensured through curriculum design and development?

University is running two types of courses that ensure their employability and extension. Course curriculum in Computer Sciences, Information Technology, Electronics, Management Studies, Electronic Media, Engineering and Technology, Tourism, Advertising and Public Relations courses is such that it ensures employability in nationally and internationally reputed organizations /industries/institutions in India and abroad in the different respective fields. Apart from this, all PG curriculums also ensure that the students can undertake

research as Ph.D. and thereafter Post Doctoral fellow in India and abroad. Some innovative courses help the students to become creative and innovative.

# **Employability**

Curriculum is designed after assessing the job opportunities through varied stakeholders.

Curriculum design ensures equal proportion of theoretical and practical knowledge. The students get practical training for skill acquirement and sound theoretical knowledge base. The students of management, engineering and technology undertake industrial / research project work and submit project reports/ dissertations on topics with utility value to associated industries/companies / institutions.

Curriculum includes field oriented problem solving ability in the students and practice oriented topics.

The courses also include industrial visits, computer training, entrepreneurial knowledge and soft skills that are useful for employment.

Newly introduced academic programmes of the university in Engineering, Management Studies, Computer Sciences, Information Technology, Electronic Media, Engineering and Technology, Basic Science, Bio and Chemical Sciences and Technology, Business, Commerce and Economics enable students employability in national and international higher educational institutions, reputed organizations /industries/institutions in India and abroad as planners, consultants, managers, auditors and implementing the small to large projects in Industry. Companies such as Philips, Tata Technologies, Tata Motors, Samsung, Accenture, Tata Consultancy Services, Star TV and Infosys have employed our graduates in the past.

Our Graduates and Ph.D.s are employed and doing research in prestigious National Institute such as Bhabha Atomic Research Centre, Indian Space Research Organisation and Defense Research and Development Organization, National Remote Sensing Agency, different laboratories of Council of Scientific and Industrial Research (CSIR), R.R. Center for Advanced Technology, Indore. [Please refer Alumni list in Evaluative Reports of the Schools/Institutes.]

#### Innovation

Design and development of the curriculum of the academic programmes by accommodating the courses that provide industrial exposure, practical training, research aptitude and contemporary knowledge and associating with research projects ensure the innovations.

The courses, which are new and first time introduced (sixteen academic programmes mentioned above enable existing courses students to do the industry related projects and later innovate in industry). Recognizing the need for the present scenario, a course curriculum incorporates the required changes and prepares today's graduates for the new and varied challenges.

#### Research

Undergraduate students in professional programmes undertake minor research project while postgraduate students undertake major research project of one / two semester(s) duration as part of their curriculum. This part of the curriculum exposes them to several research agenda on the field concerned.

The curriculum of several PG programmes accommodates the courses on statistical methods and softwares like SPSS SAS, research methodology, and a compulsory component of major research project. This ensures development of research acumen along with sharpening of their research skills

Post graduate and B.E. students after passing SLET, NET and GATE/GRE/TOFEL in Science Departments go for National labs, university across the globe for research.

1.1.4 To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created a national impact?

University use the guidelines of the regulating bodies such as UGC, AICTE, ICSSR, NCTE, and ICPR for developing and/or restructuring the curricula compulsorily. For exampleCcurriculum of Computer Science courses also consider the curricula designed by Institute of Electrical and Electronics Engineers (IEEE).

The University has been instrumental in curricular reform by introducing several new programmes first time in an Indian university which were later started in other universities viz. M.Tech. programmes in Energy Management, Future Studies and Planning, Mobile Computing Technology, Laser Science and Applications, Systems Management; M.B.A. programmes in Media Management, Financial Services, Hospital Administration, etc.

Several Professors have also been working as Board of Studies members in other Universities/Institutes as External Experts.

1.1.5 Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?

Yes, University refers to the opinion of external research bodies and Industry on regular basis in specific courses. The university collects the suggestions/feedback in the standard format from experts. The collected data are analyzed. Corporate/Employers' feedbacks are also taken.

#### **Interaction and its impact**

Interactions with research laboratories and institutions help in curriculum changes which enable the pass out PG students to pursue research in latest topics.

Interactions and project internships with industry in professional courses help in introducing practical aspects in the curriculum.

[Details of individual Schools/Institutes interactions with industry, research bodies and the civil society in the curriculum revision process are at Self Study reports of the other Schools/Institutes at www.iqac.dauniv.ac.in]

1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

Leadership is provided to affiliated colleges for enriching the curriculum by encouraging need based programmes. University has facilitated the introduction of new programmes of studies in Computer sciences, Electronics and Management since early nineties.

University facilitates the introduction of new programmes of studies in its affiliated colleges by the following methods:

#### **Method 1: Senior Faculty motivation**

: The faculty members motivate the colleges during their visits for different purposes like inspection, faculty selection, and workshops, etc. The faculty members discuss with the principal and college teachers about new programmes. The University computer centre and faculty members coordinated with Department of Electronics, Govt. of India in 1998 for setting up the computer laboratory and library at six colleges of tribal dominated districts for the DOE computer courses. An assistance of Rs. 5 lakhs was provided to each college for this purpose. It motivated the colleges to start new courses in computer science.

## Method 2: Colleges Adapt the running Programs at the University

The University starts a new academic program first at its UTD. The affiliated colleges can start that programme after getting approval from the university and other regulatory bodies. The University facilitates the colleges in setting the laboratories, selection of faculty, etc.

## Method 3: Board of Studies approving new program sought by College

The new programmes designed by the colleges can also be started after getting approval from the Board of Studies, Faculty, Academic Council, and Executive Council. The University facilitates the colleges through its faculty members and experts in designing the syllabi, setting up the laboratories, selection of faculty, etc.

# Method 4: State assigning Responsibility for curriculum of new programs in Affiliated Colleges

The State has assigned responsibilities to the University for coordinating curriculum design for UG level courses in Computer Sciences, Information Technology and Management Studies. The University coordinates with Board of studies Chairpersons of other State Universities for the UG courses in the areas.

1.1.7 Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances (not applicable for unitary universities).

Yes, Following are the instances where University encourages its colleges to start additional skill-oriented programmes relevant to regional needs by inviting participation from Colleges for training programs for additional skills.

#### Instance 1:

Training programme on Database and Data mining was held in July 2010 attended by 60 selected participants. The participants from affiliated colleges were also present.

#### **Instance 2:**

Training programme on Microsoft tools for non IT Faculty members was held with support of Microsoft India Pvt. Ltd., June 2013. Faculty from affiliated colleges also participated.

#### **Instance 3:**

Training programme on tools for cloud computing for IT faculty members was held with support of TCS Ltd. on Sept. 06, 2013.

## 1.2 Academic Flexibility

- 1.2.1. Furnish the inventory for the following:
  - Programmes taught on campus

Programmes taught on campus

S.	School/Institute	Programme taught in campus		
No.				
1.	Biochemistry	M.Sc.: Biochemistry Ph.D.		
2.	Biotechnology	M.Sc.: Biotechnology, Genetic Engineering,		
		Bioinformatics. Ph.D.		
3.	Chemical Sciences	M.Sc.: Chemistry, Applied Chemistry,		
		Pharmaceutical Chemistry. Ph.D.		
4.	Commerce	B.Com. (Accounting & Tax Management).		

		M.Com.: Accounts & Financial Control, Bank Management. M.B.A.: Foreign Trade-2 years. M.B.A. (Integrated): Foreign Trade-5 years. M. Phil, Ph.D.
5.	Computer Science and IT	B.C.A. B.C.A. (Hons.). M.C.A. M.Sc.: Computer Science, Information Technology. M.B.A.: Computer Management. M.Tech.: Computer Science, Network Management & Information Security, Information Architecture & Software Engineering. Ph.D.
6.	Economics	M.A.: Economics. M.B.A.: Business Economics, International Business, Financial Services. M.Phil., Ph.D.
7.	Education	B.Ed., M.Ed., M.Phil., Ph.D.
8.	EMRC	M.Sc.: Electronic Media. M.B.A.: Media Management. Ph.D.
9.	Electronics	M.Sc.: Electronics, (Elect & Comm.) M.Tech.: Embedded Systems, Spatial Information Technology, Mobile Computing Technology. Ph.D.
10.	Energy and Environmental Studies	M.Tech.: Energy Management. M.Phil.: Energy and Environment. Ph.D.: Energy, Energy and Environment.
11.	Futures Studies and Planning	M.Tech.: Future Studies and Planning, Systems Management. Ph.D.
12.	Institute of Engineering and Technology (IET)	B.E., M. E. And Ph. D. [Details at footnote]*
13.	Institute of Management Studies (IMS)	B.B.A.: Hospital Administration, e-Commerce. M.B.A.: Financial Administration, Human Resource, Marketing Management, e-Commerce, Hospital Administration, Disaster Management. M.B.A.: Executive. M.B.A. (Integrated): e- Commerce, Hospital Administration. M.Phil.: Management. Ph.D.: Management.
14.	Instrumentation	M.Tech.: Instrumentation. M.Sc.: Instrumentation.
15.	International	B.Com. (Hons), M.B.A.: Management Science,
	Institute of	Tourism, , Advertising & Public Relations. M.B.A.

	Professional	(Integrated): Management Science- 5 years. M.C.A.
	Studies	(Integrated)-6 years. M.Tech. (Integrated):
		Information Technology-5 ½ years. Ph.D.
16.	Journalism and	B.J., B.A. (Hons.): Mass Communication; M.A.
	Mass	(Mass Communication); M.Phil., Ph.D.
	Communication	
17.	Law	B.A.LL.B.(HONS.), LL.M., M.Phil., Ph.D.
18.	Languages	M.Phil.: Hindi Literature, English Literature, Urdu
		Literature, Sanskrit Literature, Jyotish.
		Ph.D.: Hindi Literature, English Literature, Urdu
		Literature, Sanskrit Literature, Jyotish.
19.	Library Sciences	B.L.I.Sc.; M.L.I.Sc.; M.Phil.: Library and
		Information Science.
20.	Life Sciences	M.Sc.: Life Science, Industrial Microbiology
		M.Phil., Ph.D.
21.	Life Long	1.PG Diploma in Population Education &
	Learning	Demography- 1 Year
		2.Diploma in Interior Designing- 2 Years
22.	Mathematics	M.A./M.Sc.: Mathematics. M.Phil.: Mathematics.
		Ph.D.: Mathematics.
23.	Pharmacy	B.Pharm M.Pharm. Ph.D.
24.	Physical	B.P.E., M.P.Ed., M.Phil., Ph.D.
	Education	
25.	Physics	M.Sc.: Physics, Material Science. M.Phil.: Physics.
		M.Tech.: Laser Science & Applications. Ph.D.
26.	Social Sciences	P.G.Diploma: Human Rights, Guidance and
		Counseling. Diploma: Labour Law, Personal
		Management, Consumer Psychology and
		Advertisement. B.S.W., M.S.W., M.Phil:
		Sociology, Social Work, History, Political Sc.,
		Home Sc., Geography, Psychology, Philosophy.
		Ph.D.: Sociology, Social Work, History, Political
		Sc., Home Sc., Geography, Psychology,
		Philosophy, Military Science.
27.	Statistics	M.A /M.Sc.: Statistics. M.Phil., Ph.D.

University Yoga Centre offers M.A.(Yoga) (2 Years PG Course) Ph.D. (Yoga Philosophy).

University offers a number of programme options leading to different degrees in UG as well as PG courses. The courses being run at IET are as follows:

\* B.E. Mechanical Engg., Computer Science and Engg., Electronics & Instrumentation Engg., Information Technology Engg., Electronics & Telecommunication Engg., Civil Engg. B.E. Programs (Part-Time) Mechanical Engg., Electronics & Telecommunication Engg., M.E. Computer Engg. with specialization in Software Engg., Information Technology with specialization in Information Security; Electronics Engg. with specialization in Digital Communication, Electronics Engg. with specialization in Digital Communication, Industrial Engg. & Management, Mechanical Engg. with specialization in Thermal & Design Engg. M.E. Programs (Part-time), M.Sc. Programme: Full Time 2 Year Applied Mathematics with specialization in Computing & Informatics. 2. Ph. D. in 1. Computer Engg. 2. Electronics and Telecommunication Engg. 3. Mechanical Engg. 4. Applied Mathematics 5. Applied Chemistry 6. Applied Physics.

# Overseas programme offered on campus: None

## Programmes available for colleges to choose from

Any programme running at the University can also be chosen by a college, provided, in case regulatory body approval is needed then the same should have been granted by that body. University permits a program to launch after statutory procedures.

## Overseas programme offered on campus

None

## Programmes available for colleges to choose from

Any programme running at the University can also be chosen by a college, provided, in case regulatory body approval is needed then the same should have been granted by that body. University permits a program to launch after statutory procedures.

1.2.2. Give details on the following provisions with reference to academic flexibility

Schools/Institutes offer number of Elective Options and enrichment courses, Details of these with reference to academic flexibility of the Schools/Institutes are at Self Study reports of the other Schools/Institutes at <a href="https://www.iqac.dauniv.ac.in">www.iqac.dauniv.ac.in</a>. Learners have academic flexibility. Following are some examples:

#### Academic flexibility for the choice of courses

University has academic flexibility for the choice of courses in the School/Institute. University has flexibility of choosing among the M.B.A., B.E. and M.Tech./M.E. number of subjects and specializations.

## **Core / Elective options**

Learners have academic flexibility in the Schools/Institutes to opt the elective and enrichment courses. Some example:

S. No.	School/Institute	No. of Core	Total Credits	Total Credits	
		Papers in each	for Core	for Elective/	
		Course in four	Papers in	Options	
		Semesters	each Course	Papers in each	
			in all	Course in all	
			Semesters	Semesters	
1	Economics	-	48	32	
1 2	Economics Energy and	- MTech-	48 52.5	32 12	
2		- MTech- M. Phil-			
2	Energy and		52.5		
3	Energy and Environmental		52.5		

# **Enrichment courses**

Learners have academic flexibility in the Schools/Institutes to opt the enrichment courses. Some examples

S. No.	School/Institute	Enrichment Courses offered to advanced learners
1	Computer Science and Information Technology	Courses on Motivation, Communication Skills, English & Personality Development, and Special courses on Android, VB, .net, Database and Data mining are organized for students on regular basis.
2	Economics	Communication Skills, Business Enhancement Skills, Operations Research Business forecasting, Econometrics, International Business finance, Strategic financial management, Enterprise Risk Management.
3	Education	Enrichment classes are organized on regular basis and given space in regular time table.
4	EMRC	Soft Skills Training, Photography, DTP, Dramatics
5	Energy and Environmental Studies	Computer Applications: Energy and Environmental Software's
6	Law	French is Taught as a Foreign Language in BA.LL.B.)
7	Pharmacy	CSPD, Computer sciences, Management
8	Statistics	COMPUTER and Statistical software applications

## **Part-time courses**

University offers part-time courses in B.E. /M.B.A. courses for working persons.

#### Courses offered in modular form

Three integrated courses are available in modules of UG + PG. MCA (BCA-Hons. + MCA), BHA+MHA, MBA-MS 5 Yrs. (3+2), M.Sc. (Electronic Media) (3 yrs B.Sc. 2 yrs M.Sc.

#### Credit accumulation and transfer facility

No

# Lateral and vertical mobility within and across programmes, courses and disciplines

No

1.2.3. Does the university have an explicit policy and strategy for attracting international students?

Yes, International Cooperation Cell has been set up at the University level. The cell is engaged in preparing an explicit policy and strategies for attracting international students. University expects fruitful collaborations in future through this cell.

Students who have worked in the University for Ph.D. degree (enlisted various disciplines other than Ph.D. also) are as follows:

#### **School of Computer Science and Information Technology**

- (i). Ms. Vaatarna working in Naresuan University, Thailand completed her Ph.D. from School of Computer Science and IT under guidance of Dr. A. K. Ramani. (24/12/2008)
- (ii). Mr. Daniel Norren completed 8 credits for completion of MS degree from Tilburg University, Netherlands. (Jan-May, 2009)
- (iii).Mr. Shakeel Ahmed, from King Faisal University Saudi Arabia "Quality of services for mobile adhoc networks" was registered under Dr A. K. Ramani in August 2008 and has completed his Ph.D. in July 2013.

# School of Biotechnology

- 1. Collaborating for research with Institute of Animal Physiology and Genetics, Libechov, Czech Republic.
- 2. Collaboration is in progress with Kunk University, Korea.
- 3. Collaboration for summer training programme with University of Poiters, France: Two students from University of Poiters worked at School of Biotechnology for 3 months as summer trainees

- 4. Mr, Krityanand K Mahatman from Nepal completed his Ph.D. in Biotechnology under supervision of Prof. Anil Kumar. He was recipient of a fellowship from TWAS, and
- 5. Dr, Abebe Demissie joined as Post Doctoral Fellow with Prof Anil Kumar. He is recipient of C. V. Raman International Fellowship from FICCI.

# **Institute of Management Studies**

- Dr. P. K. Gupta guided two students [one from Nepal and Mr. D. K. Sharma American Green Card Holder] and were awarded Ph. D. under his supervision.
- 1.2.4. Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.

International Institute of Professional Studies was started in 1991 for courses targeting international students since 1992. However, due to impediments mentioned below the viable number of students could not be attracted, except NRIs.

- (i). Need of additional faculty members with much experience
- (ii). Residential International grade facilities for foreign students
- 1.2.5. Does the university facilitate dual degree and twinning programmes? If yes, give details.

No

1.2.6. Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

Yes, twenty Schools/Institutes offer self-financing programmes. List of the self finance programs are as follows:

S. No.	School/Institute	Self-financing programmes		
1	Bio-technology	M.Sc. Genetic Engg. M.Sc. Bioinformatics;		
2	Chemical	M.Sc. (Applied Chemistry), M.Sc.		
	Science	(Pharmaceutical Chemistry);		
3	Commerce	B.com (Accounting & Tax Management)		
		M.com(Accounts & financial control),		
		M.com(Bank Management), MBA(Foreign		
		Trade) 2 yrs; MBA(Foreign Trade) 5 yrs, M.		
		Phil(Commerce)		
		Ph.D. Commerce		

4	Comp. Sci. and	BCA, BCA (Hons.), M.Sc.(IT), MBA(CM), M.
	IT	Tech.(CS), M. Tech.(NM), M. Tech(SE)
5	Economics	MBA(Business Economics, International
		Business, Financial Services)
6	EMRC	M.Sc. (Electronic Media); MBA (Media
		Management);
7	Electronics	M.Sc. (Elect & Comm.), M. Tech. (Embedded
		Systems); M. Tech. (Spatial Information
		Technology), M. Tech. (Mobile Computing
		Technology)
8	Futures Studies	M.Tech. in Systems Management
	and Planning	
9	I.E.T	B.E., M. E. And Ph. D. [Details at footnote]*
10	Institute of	BBA (HA), BBA (Ecom.), MBA (FA) (MM)
	Management	(EC) (HA) (DM) (HR), MBA(Executive), MBA
	Studies (IMS)	(EC) (HA),
11	Instrumentation	M. Tech. (Instrumentation), M.Sc.
		(Instrumentation)
12	International	Commerce– B.Com(Hons)
	Institute of	Management- MBA(MS), Tourism - MBA(T),
	Professional	Advertising & Public Relations MBA(APR)
	Studies	Management – MBA(MS) 5yrs, Computer
		Science – MCA(6yrs), Information Technology
		- M.Tech (IT) 5 ½ yrs
13	Law	B.A.LL.B.(HONS.), LL.M., Ph.D.
14	Languages	M.Phil. (Hindi Literature, English Literature,
		Urdu Literature, Sanskrit Literature/Jyotish)
		Ph.D Hindi Literature, English Literature, Urdu
		Literature, Sanskrit Literature/Jyotish
15	Library Sciences	B. L. I. Sc.; M. L. I. Sc.; M.Phil in Library and
		Information Science
16	Life Sciences	M.Sc. Industrial Microbiology
17	Life Long	1.PG Diploma in Population Education &
	Learning	Demography- 1 Year
		2.Diploma in Interior Designing- 2 Years
1.0	1	
18	Pharmacy	B. Pharmacy; M. Pharmacy
18	Pharmacy Social Sciences	B. Pharmacy; M. Pharmacy B.S.W., M.S.W.

Political Sc., Home Sc., Geography ,
Psychology, Philosophy), Ph.D. Sociology,
Social Work, History, Political Sc., Home Sc.,
Geography, Psychology, Military Science

- \* 1. B.E. (Mechanical Engg.), (Computer Science and Engg.), (Electronics & Instrumentation Engg.), (Information Technology Engg.), (Electronics & Telecommunication Engg.), (Civil Engg.) Programs (Part-Time), (Mechanical Engg.) (Electronics & Telecommunication Engg.), M.E. Computer Engg. with specialization in Software Engg., Information Technology with specialization in Information Security; Electronics Engg. with specialization in Digital Instrumentation, Electronics Engg. with specialization in Digital Communication, Industrial Engg. & Management, Mechanical Engg. with specialization in Thermal & Design Engg. Programs (Part-time), M.Sc. Programme: Full Time 2 Year Applied Mathematics with specialization in Computing & Informatics.
- \* 2. Ph. D. in 1. Computer Engg. 2. Electronics and Telecommunication Engg. 3. Mechanical Engg. 4. Applied Mathematics 5. Applied Chemistry 6. Applied Physics.

Admissions are through entrance tests like CET, CMET and dedicated test for Ph.D. and M. Phil. Fee structure is decided by the University which is available on University website. Salary and qualifications of the self finance program teachers are at par with that of regular teachers. Full time permanent Teachers are getting salaries as per UGC scale (basic pay plus grade pay and State Govt. DA and HRA rules). Full time contract Teachers are getting salaries as per UGC scales Rs. 15600 basic + Rs. 6000 Grade Pay consolidated and no DA and HRA.

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- 1.2.7. Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.
- No, University does not provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education. Though university offers one Distance Education Programmes (DEP) i.e. MBA.
- 1.2.8. Has the university adopted the Choice Based Credit System (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?

1.2.9. Some of the UTDs have implemented choice based credit system while others are in process.

Curriculum of Schools/Institutes offers a number of elective options. Options are available to students for additional/supplementary / enrichment courses along with their regular curricula in same department but not for another degree.

# **Choice of Opting Lesser Credits and Extending the Duration**

University Ordinance 31 stipulates that a four semester course can be extended up to three years. Ordinance at present does not permit student to pass a course with less number of credits. Each student must pass same number of credits.

# Credit transfer from a department to another department of University or Affiliated College

Not in practice at present.

1.2.10. What percentage of programmes offered by the university?

The following type of programs are offered by the university

Annual and Trimester systems: None; 0%; <u>Semester system</u>: 100% semester system is followed in UTD since 1990 and it was applied in colleges since 2010 in UG Programs.

1.2.11. How does the university promote inter-disciplinary programmes? Name a few programmes and comment on their outcome.

University promotes inter-disciplinary programmes by providing financial, administrative and academic support. The University has been running the following programmes as inter-disciplinary programmes:

No.	Programme	Programme Title	Year of
			Starting
1.	M.Tech.	Future Studies and Planning	1990
2.	M.Tech.	Energy Management	1990
3.	M.Tech.	Systems Management	2005
4.	M.B.A.	Disaster Mgt., Business Economics, e-	-
		Commerce, Hospital Administration,	
		Media Management	
5.	M.E.	Industrial Management	2002
6.	M.Sc.	Bioinformatics	2009
7.	M.Sc.	Electronic Media	2002

University has Inter-disciplinary courses run in Schools/Institutes that are the combinations of their specific domains. M. Tech. (Future Studies and Planning) and M. Tech. Energy Management [Since 1990], M.S. Instrumentation (1992) (later recognised as M. Tech. Instrumentation since

1998 by AICTE), M.Tech. (Mobile computing) [Since 2008], M.Tech. (Spatial Information Technology) [Since 2007], M.E.(Digital Communication), M.Tech. (Embedded System) [Since 2002], M.Tech. (System Management) [Since 2005] M.Tech. (Network Security and Information System) [Since 2008], M.Sc. Bioinformatics [Since 2009] and M.E. (Industrial Management), M.B.A. programmes in Disaster Management, Business Economics, e-Commerce, Hospital Administration, Media Management)

#### Outcome

Some of the programmes like M.Tech. (Energy Management), M.Tech. (Systems Management), M.B.A. (BE), M.B.A. (e-comm.), M.B.A. (HA), M.E. (IM), M.B.A. (Media Management), M.Sc. (Bioinformatics), M.Sc. (Electronic Media), are very successful in terms of placements and students intake. While other programmes like M.Tech. (Future Studies and Planning), M.B.A. (Disaster management) are having moderate demand.

Students of very high GATE percentiles take admission in several M. Tech courses. Most programs are successful and have nearly 100% employability.

#### 1.3 Curriculum Enrichment

1.3.1 How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented knowledge intensive and meeting the emerging needs of students and other stakeholders?

Schools/Institutes make efforts to enrich the course curricula to meet the emerging needs of students and other stakeholders. All the syllabi are revised at regular intervals during the time frame of 2008 to 2013. Contents of the syllabus are carefully structured to cover knowledge intensive input along with application areas. The syllabus of all the courses covers basic to advanced level. Most courses of the UTDs are job oriented and have good placement record. For curricular revision informal as well as formal feedback is taken from the students of diverse backgrounds. Online link of students' feedback is also designed.

1.3.2 During the last four years, how many new programmes at UG and PG levels were introduced? Give details.

Inter-disciplinary M.Sc. (Bioinformatics) in 2009

Programmes in emerging areas:

Life long Learning: Inter-disciplinary- PG in Extension Education and Rural Development, PG Diploma in Population Education and Demography, Diploma in women Empowerment and Lifelong Learning, Diploma in Fashion Design and Bachelor in Interior Design.

Programmes in emerging areas— Women Empowerment, Lifelong Learning and Extension work.

1.3.3 What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision?

Contents of every syllabus are carefully structured to cover knowledge intensive input along with application areas. The syllabi of the entire course cover basic to advanced levels. The collaborative and participative strategies are adopted for curriculum revision and updates include discussions among the staff members, interactions with outside experts, suggestions made during the comprehensive viva voce by the External Experts and views of the various stakeholders.

100% courses underwent a syllabus revision in Schools/Institutes. Affiliated colleges syllabi are revised after every 3 years. In some emerging areas like Biotechnology revision of affiliated colleges, syllabus at UG level is done regularly.

1.3.4 What are the value-added courses offered by the university and how does the university ensure that all students have access to them?

Schools/Institutes plan the value added courses. All the students related to the subjects are provided opportunity for access to these courses. Details are at the SSR of the individual school/institute at www.iqac.dauniv.ac.in.

#### Value added courses

Following are the select examples of the value added courses offered since 2012: (i) Language Laboratory; (ii) Psychology Laboratory (iii) Computer IT skill classes (iv) Research Methodology (v) Managerial Applications of Excel for students (vi) SPSS for data Analysis

All the students have access to all these courses through three methods:

Research Methodology course was taught using Virtual Class room at Institute of Engg. and Technology. The Faculty taught at IIT Bombay and University students participated in the course during June 2012.

University Career Counseling and Opportunities Cell plan the career related value added courses. All the students are provided opportunity for access to all these courses.

**1.3.5.** Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?

Process has been initiated and Preliminary discussions have been held. University is planning from second semester of academic year 2013-14.

#### 1.4 Feedback System

1.4.1 Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Yes, University introduced Feedback formal form for taking the student feedbacks in 2006. Initially selected Schools/Institutes adapted to formal mechanism. Now all Schools/Institutes have adopted. Feedback is taken at the end of each Semester. Feedback is taken for the evaluation, use of ICT and teaching-learning process of each course. Feedback form has columns for suggestions of the students on curriculum and laboratory exercises. Suggestions are taken in all the courses at the end of each academic session on the University approved format. The analysis by the Schools/Institutes of student feedbacks is also hosted at the University IQAC website.

Student's feedback for teaching-learning and evaluation process also asks suggestions on curriculum and laboratory. Student's suggestions along with other stakeholder's feedback, opinion and suggestions follow the brainstorming sessions. The sessions are conducted under curriculum revision workshop or Assessment workshop or table discussions. The online feedback system is also being used in several School/Institutes.

**1.4.2** Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.

## University elicit feedback on the curriculum

Schools/Institutes elicit feedback on the curriculum from national and international faculty through e-mails, during interactions in Expert lectures, during their visits to the School/Institute and during Faculty visits to the National/International Conferences.

The corporate and alumni who are in senior position suggest curriculum updates through mail to the respective placement Officers in the School/Institute. These are also considered in curriculum committees or workshops at the School/Institute.

# Workshops: Curriculum development Workshops are held in Institutes of the University.

- 1. CBCS based Curriculum development Workshop has taken place in Institute of Engineering and Technology on May 2013 (Prof. Rege from College of Engineering, Pune)
- 2. Curriculum development Workshop and Case studies workshops have taken place at Institute of Management studies in 2012.
- 3. Curriculum development Workshop has taken place at International Institute of Professional Studies in 2012

Webinars: Webinars and online discussions are planned from 2013-14.

1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of

Faculty of affiliated institutions give feedback on curriculum enrichment when they interact with the Senior Faculty on inspection or during Faculty selections or during Faculty participation at the University workshops and Expert Lectures. Board members from colleges also participate in the Board meetings for the curriculums.

1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?

The measures undertaken for sustenance and quality enhancement undertaken by the university in ensuring the effective development of the curricula are as follows:

Ordinance 31 provides for a Comprehensive Viva Voce Examination at the end of each semester for each course. Each Board has two External members nominated by Vice Chancellor (Chairperson Academic Council) and two internal members. Board examines the standard and topics in the curriculum of the course and how effectively the curriculum has been taught. Board gives a report to the Vice Chancellor. The measures are then undertaken by teaching – learning process committee or Departmental Committee for Curriculum to revise the curriculum.

Schools/Institutes arrange the Expert Talks/Lectures. The suggestions from Experts are taken after the lecture. The suggestions from Visiting Alumni and Industry Experts are also undertaken. Experts are taken after the lecture.

Internal and External Academic Audits, which includes curriculum, are done through departmental and University IQAC members. Quality sustenance and quality enhancement measures are regularly undertaken for ensuring the effective development of the curricula.

Any other information regarding Curricular Aspects which the university would like to include.

Curriculum design in Schools/Institutes is in line with the University concept of autonomy with accountability, participative Management and collective wisdom.