	Sanctioned posts for AY 2021 Department	Sanctioned Intake I year	Sanctioned Intake II year	Sanctioned Intake III year	Sanctioned Intake IV year	Required Faculty	I year Faculty	Total .
1	Computer Science & Engineering	180	180	180	180	27	4	31
2	Information Science Engineering	120	180	120	120	21	0	21
3	Electronics and Communication Engineering	180	180	180	180	27	3	30
	Mechanical Engineering	60	60	180	180	21	4	25
	Electrical & Electronics Engineering	:41	*	1	60	3	4	7
~	Civil Engineering	60	60	120	120	18	3	21
	Artificial Intelligence and Machine learning	60			-	3	0	3
8	MBA	60	60	60	60	9	0	9
9	Physics						6	6
10	Chemistry	*	-	-	-		6	6
1	Maths	100					8	8
				-1 1		Sand	ctioned post	s 167



Prof. Hussain Ahmed IQAC Head HKBK College of Engineering Bengaluru - 560045

Affiliation for 2020-21 VTU Norms and Standards



Estd: 1998

VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA" MACHHE, BELAGAVI

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PREAMBLE:

All the colleges of engineering and technology in Karnataka affiliated to VTU, Belagavi, are required to maintain certain minimum norms and standards for continuation of their recognition under VTU Act 1994 and AICTE Act 1987. All the institutions should satisfy the minimum infrastructural facilities and academic standards, such as land, building, classrooms, computing facilities, library facilities, faculty etc.

1. Institutional Governance:

a. Constitution of Governing Council/ Board of Governors

This shall be as per AICTE/VTU Statues

b. Rules and Regulations

The College shall have comprehensive Cadre and Recruitment Rules governing Staff recruitment, salary, promotion, Faculty appraisal, duties and responsibilities. Also, other rules required for governance along with the C and R rules, approved by the GC/BoG.

2. INFRASTRUCTURE:

NORMS FOR UG PROGRAMS:

A. LAND REQUIREMENT

Category	Mega / Metro Cities *	Urban * \$	Rural *
Engineering & Technology	1.5 Acres	2.5 Acres	7.5 Acres

B. For Standalone Architecture and Town planning Colleges

Architecture & Planning	Minimum 2 Acres or 8	2000 Sa m
Town Planning	Willing 2 Acres of c	5000 Sq. III.

^{*}Competent authority to certify that, the place is located in Mega/Metro cities or Urban or in a Rural area.

(Competent authority to certify in Metro/ Urban/ Rural area will be the Corporation Office (BBMP)/ Town Municipal Office/ Village Panchayat Office/ Revenue Authority)

In urban areas the 2.5 Acres can be split into two plots with the academic, instructional, administrative and amenities area shall be in one plot not less than 1.5 acres. The distance between the plots shall not exceed 2.0 km. The remaining land will only be utilized for sporting infrastructure/ Hostel/Staff accommodation and related educational activities of the Institution.

3. NORMS FOR INFRASTRUCTURE

1. Instructional Area #:

A. Engineering & Technology

		Area Sq. m.		Min	imum	Numl	oer of	Room	ns/In	take	
Particul	Particulars		240	300	360	42 0	48 0	54 0	60 0	66 0	72 0
Class Rooms *	UG	66 Sq.m. /Room	12	15	18	21	24	27	30	33	36
Class Rooms	PG	33 Sq.m. /Room	2 Rooms / Course								
Tutorial Rooms (Optional)	33 Sq.m. /Room	3	4	5	5	6	7	8	8	9	
Drawing Hall 132 Sq			Desired (As per curriculum)								
Computer Centr	Computer Centre		Can be used as CCP Lab / CAED Lab/ Language Lab)								
Workshop		200 Sq.m.	200 Sq.m.								
Laboratories	UG	66 Sq.m. /Roo	om	6/Co	urse						
Laboratories	PG	66 Sq.m. /Roo	om	m 2 / Specialization							
Physics Lab		150 Sq.m.	O Sq.m.								
Chemistry Lab	Chemistry Lab 1										
Library & Reading Room 400 Sc		400 Sq.m. **	400 Sq.m. **								
Seminar Halls	UG	One/ 2 UG Co	urses								
Schillar Halls	PG	One/ PG Cour	ses in	the de	partme	nt					

^{**} Additional library (reading room) area of 50 Sq.m. per 60 students for the approved intake beyond 420 including UG/PG programs.

B. For Architecture and Town Planning (for Integrated Course)

					108-404 004-50	<u></u>	
Pa	articulars	Area Sq.		Minimum	Number of Room	ıs/Intake	
				40	80	120	
Class		66 Sq.m. /Room	4 8 12				
Rooms *	PG	33 Sq.m. /Room			1/Specialization		
UG Studio		120 Sq.m.		4	8	12	
PG Studio		66 Sq.m.	Minimum one				
Computer	Centre	75 Sq.m.					
	Model making and Carpentry Workshop		132 Sq.m.				
Laboratories		66 Sq.m. /Rd	Sq.m. /Room 2/Course				
Library & Reading Room		150 Sq.m.	50 Sq.m.				

Seminar Halls	One per Program

^{*} Number of Class Room = (Number of Divisions/Year \times Duration of the Course) \times 0.75 \pm 10% variation in Area is permitted.

Note:

- The above areas do not include the rooms of the teaching staff even though such staff rooms are attached to the laboratories. However, they do include the sitting space for the technical supporting staff and storage of laboratory consumables and instruments.
- Out of total number of Classrooms per department at least one shall be Smart Classroom

C. For Standalone Architecture and Town Planning

		Diaman									8						
		Area		Minimum Number of Rooms/Intake													
Particu	Particulars		1 st Year			2 nd Year		3 rd Year		4 th Year		5 th Year		ar			
		Sq. m.	40	80	120	40	80	120	40	80	120	40	80	120	40	80	120
		60															
	UG	Sq.m.	1	2	3	1	2	3	2	3	4	2	3	4	2	3	4
Class		/Room															
Rooms		33															
	PG	Sq.m.		Minimum one/ Specialization													
		/Room	om														
UG Studio	120 Sq.m.	1	2	3	2	4	6	3	6	9	4	8	12	4	8	12	
PG Studio		66 Sq.m.					M	inimı	ım o	ne/	Speci	aliza	tion				
Computer Centre	•	60 Sq.m.							Min	imu	m one	9					
Laboratories and Workshops		40Sq.m. each	1	1	1	2	2	2	2	3	3	2	3	3	2	3	3
Library & 0.6 Sq.m./Student up to total additional beyond sanctioned							_	gth of	200 a	and ().3 Sq	.m. fo	or eve	ery			

2. Administrative Area

Sl No.	Particulars	Area in Sq. m. (As per AICTE)	Area in Sq. m. (As per CoA)
1	Principal's room	30	30
2	Head of Dept	10	NS
3	Department Office	20	NS
4	Faculty room	5 x n*	Prof 12 Sq.m. each Assoc. Prof 12 Sq.m. each Asst.Prof 6 Sq.m. each

5	Store room	30	NS
6	Maintenance/Estate office	10	NS
7	Reception Office	25	NS
8	College Office	150/300**	60 Sq.m.
9	Board room	20	NS #
10	Security	10	NS
11	House keeping	10	NS
12	Examination Office	30	Adequate
13	Placement Office	30	NS
14	Pantry for Staff	10	NS

^{*} n: Number of faculty members required for departments as per AICTE norms

3. Amenities:

Sl No.	Particulars	Area in Sq. m. (As per AICTE)	Area in Sq. m. (As per CoA)	
1.	Sports Club/Games/Gymnasium	200	Adequate	
2.	Boys' Common Room	100	Adequate	
3.	Girls' Common Room	100	Adequate	
4.	Cafeteria	150	Adequate	
5.	Toilets	350	Adequate	
6.	First Aid & Medical Room	10	NS	
7.	Stationery Store and Reprography	10	Adequate	
8.	Auditorium/ Amphi Theater	400	Adequate	

4. Library Facilities

Particulars		Eng	gg. & Technology	Architecture & Town Planning		
	UG	100 /Course	50 titles shall be added every year per course	100	50 titles shall be added every year	
No. of Titles	PG	50 /Course	After the completion of 2 years of establishment of the course 10 % of the titles shall be added every year for per course	50	As required	

^{** 150} Sq.m for one Program, 300 Sq.m. for more than one Program.

^{*} NS - Not specified. Wherever the norms are not specified in CoA, AICTE norms are to be followed

No. of Volumes	UG	500 /Course	250 volumes shall be added every year per course	400 x Number of Divisions	400 x Number of Divisions to be added every year	
1101 01 1010111100	PG 200 /Course 100 volumes shall be added every year for per course		100	100 to be added for additional division		
National Journal	ls	06 /Division				
International		Desirable for UG Programs				
Journals		Essential for PG Programs				
e-Journals		As per AICTE Norms (VTU's e- consortium)				
Digital Library		Minimum of 10 Multimedia PCs with adequate sitting space				

Note:

- 1. Reprographic facility in the library is essential.
- 2. Document scanning facility in the library is essential.
- 3. Document printing facility in the library is essential.
- 4. Availability of NPTEL / Swayam facility at the library is essential.
- 5. Computerized indexing with bar coded / RF tagged book handling is desired.
- 6. 50 % of total number of titles and volumes each can be in the form of e-books with intranet access.
- 7. The institution should be member of National Digital Library
- 8. Sharing of Journals across UG/PG departments is permitted
- 9. The institution should be member of VTU's e-consortium

4 (a) Library Facilities (For Standalone Architecture & Town planning)

- Minimum 300 books on subjects of Architecture shall be available in the library for the intake of 40 (including minimum 100 titles)
- Add 150 books on subjects of Architecture (including minimum 50 titles) for every additional intake of 40.
- From second year onwards, minimum 120 books on subjects of Architecture (including minimum 40 titles) for every year per intake of 40.
- Library of old schools, having more than 5000 Titles; should acquire minimum 30 titles on subjects of Architecture per intake of 40 every year.
- Journals and Periodicals of architectural relevance as below

Intake	I		II		III		IV		V	
/Year	Internat	Natio								
,	ional	nal								
40	1	4	1	4	2	6	2	8	2	8
80 and Above	1	4	2	5	2	8	4	10	4	10

Note: e-books and e-journals along with computer terminal with net facility for reference. At least 2 Refereed journals (Min. 1 international) per intake of 40 shall be subscribed.

5. Computing Facilities:

o. compating i demicios.							
No. of DCo	UG PC : Students :: 1: 6						
No. of PCs	PG PC : Students :: 1: 4						
No. of Terminals on LAN/WAN	All						
Relevant legal Software	As required for curriculum						
Relevant Application Software	As required for curriculum						
Peripherals (printer/Scanner/Plotter)	5 % of Total number of systems available						
	Intake Speed						
	< = 300 32 Mbps						
Internet speed (Leased line	301 – 600 48 Mbps						
connectivity)	601 – 900 64 Mbps						
	901- 1500 100 Mbps						
	>1500 200 Mbps						
	Adequate number of Printers, Computers,						
Facility for online QPDS	Network bandwidth for Internet connectivity,						
	UPS, CCTV						

Note:

- 1. Library, Administrative offices and Faculty members shall be provided with exclusive Computing facilities along with LAN and Internet. This shall be considered as over and above the requirement meant for PCs to student ratio.
- 2. PC may also include laptop in the inventory of the Institute.
- 3. Secure Wi-Fi connectivity at 4 or 5 hotspots shall be made available
- 4. Arrangement shall be made for viewing e-content from NPTEL/ SWAYAM etc.

6. Teaching:

A). Faculty Requirement:

For UG Programs (Engineering & Technology)

Qualification: As per AICTE Norms

Principal/Director: 1(To include as Professor in concerned Department)

Cadre Ratio: Professor: Associate Professor: Assistant Professor (Minimum Cadre Ratio shall be

1: 2:6 or better)

Faculty: Student Ratio .. 1 : 20

racun	racuity. Student Ratio 1 . 20														
DEPARTMENT WORK LOAD (X)					I YEAR WORK LOAD (Y)										
Sl.No. Dept.	Dont		Intake			Intake									
	рери.	30	60	90	120	180	240	300	360	420	480	540	600	660	720
1	ECE	1:1:3	1:2:6	1:3:9	2:4:12	3:6:18	1	1	1	1	2	2	2	3	3
2	CSE	-do-	-do-	-do-	-do-	-do-	2	2	2	3	3	3	4	4	5
3	CV	-do-	-do-	-do-	-do-	-do-	1	1	1	1	1	2	2	3	3
4	EEE	-do-	-do-	-do-	-do-	-do-	2	2	2	3	3	3	4	4	5
5	Mech.	-do-	-do-	-do-	-do-	-do-	2	2	2	3	3	3	4	4	5
6	Phy.	-	-	-	-	-	2	2	3	4	4	5	5	6	6
7	Chem.	-	-	-	-	-	2	2	3	4	4	5	5	6	6
8	Maths	-	-	-	-	-	4	4	4	5	6	7	7	8	8

For UG-Architecture and Town Planning Programs

Qualification: As per AICTE/CoA Norms								
Cadre Ratio: Professor: Associate Professor: Assistant Professor (Minimum Cadre Ratio								
shall be 1: 3: 9/1: 3: 10 or better)								
Faculty: Student Ratio :: 1 : 16								
AICTE CoA								
Intake 40 80 120 40 80 120								
Cadre Ratio	1:3:9	2:6:17	3:9:26	1:3:10	2:6:20	3:10:28		

For PG Programs

FOI FO Flograms								
Qualification: As per AICTE Norms								
Principal/Director: 1(To include as Professor in concerned Department)								
Cadre Ratio: Professor: Associate Professor: Assistant Professor								
Programe	Programe Particulars							
"	Intake							
M.Tech.#	18	24	30					
	1:1:1	1:1:2	1:2:2					
M.Arch./ M.Plan ##	Intake							
(as per AICTE for	20							
Integrated Course)	1:1:2							
	Intake							
MCA**	60	120	180					
	1:2:6	1:4:13	2:6:19					
MBA **	1:1:4	1:3:8	2:4:12					

Faculty: Student :: 1 : 12Faculty: Student :: 1 : 10Faculty: Student :: 1 : 20

Note:

- 1. For the calculation of departmental staff- student ratio, the total number of faculty required is X
- 2. Y is the number of additional faculty required to cater to first year work load
- 3. For an intake > 600 students, there should be at least one Professor and one Associate Professor and Y-2 Assistant professors in Physics, Chemistry and Mathematics departments, each
- 4. There shall be separate qualified faculty to teach Kannada, English and Constitution of India and Professional Ethics (CIP)
- 5. Any Adjunct Faculty / Resource persons in the department should not be considered against the cadre ratio of 1:2:6
- 6. The colleges having 2^{nd} shift course may use 50% of Regular faculty and remaining 50% of faculty must be appointed exclusively for 2^{nd} shift courses

- 7. For standalone Architecture and Town planning course,
 - Only candidates registered with Council of Architecture (COA) under the provisions of the Architects Act, 1972 shall be eligible for the core faculty posts subject to minimum qualifications and experience as prescribed by CoA.
 - Full time faculty may be recruited in the allied areas from the field of Engineering / Fine Arts / Humanities, etc. provided that there is a minimum of 12 core full time faculty along with Head for an intake of 40. The faculty from allied areas shall not exceed more than 3 for an intake of 40, 6 for an intake of 80 and 9 for an intake of 120. Further, they should be appointed only at the posts of Associate Professor and Assistant Professor in the cadre ratio of 1:2. The minimum qualifications and experience required for appointment of these faculty shall be as per AICTE/UGC Norms, as the case may be.
 - To maintain teacher/student ratio of 1:10, the institution shall have requisite number of visiting faculty teaching equivalents in addition to Full time teaching staff
 - One Professor Design Chair for every intake of 40 can be appointed and shall be counted against Professor Cadre
 - Professor Design Chair and other faculty members appointed on tenure basis cannot be considered as Head of the Institution / Principal / Dean/ Head of Department
 - Up to 50% of the faculty members other than Professors (excluding Professor Design Chair) can be on tenure basis. The minimum duration of tenure should be 3 years.

B). (a) Technical/ Supporting Staff (for Integrated Course)

Sl.No.	Cadre	Number of Staff Required		
1	Foreman / Supervisor	One per Program		
2	Instructor / Assistant Instructor/ Mechanic	One per Laboratory		
3	Helper	One per Laboratory		
4	System Analyst	One for Central Computer Centre		
5	Programmer	Minimum Two (2)		
6	Librarian	One		
7	Physical Education Director	One		

(b) Non- Teaching Staff (For Standalone Architecture & Town planning)

Sl.No.	Cadre	Number of Staff Required					
	Cadre	40	80	120			
1	Librarian	1					
2	Asst. Librarian	0	0	1			
3	Lab/ Workshop Technician	3	3	5			
4	Administrative personnel	5	9	10			
5	Accounts personnel	4	4	9			
6	Helpers	As required					

7. Other Norms:

A. Increase in Intake / Starting of New course:

Institutions shall be eligible for new Course(s)/ expansion of existing Course(s), equal to the number of valid NBA accredited Course(s), limited to a maximum FOUR new Course(s)/expansion of existing Course(s) within the definition of Division/Programme/level in the Regular/First Shift, subject to the following conditions:

- a. A maximum of two Divisions shall be allowed to be added in the existing valid NBA accredited Under Graduate/ Post Graduate Course(s), subject to the condition that total number of Divisions after expansion per Course shall not exceed **THREE Divisions**
- b. New Under Graduate Course(s) with only ONE Division shall be allowed at respective level including Technical Campus
- c. New Post Graduate Course(s) with only ONE Division shall be allowed in specializations where corresponding or relevant Under Graduate Course(s) exist
- d. Institutions with any accredited Course shall be permitted to utilize the benefit of accreditation **only once** for increase in Intake/ additional Course(s) etc
- e. If an Institution is having more than FOUR accredited Courses, the accredited Course(s) above FOUR shall be utilized for increase in Intake/ additional Course(s) in the subsequent years subject to the validity of accreditation
- f. Institution getting approval for new Course(s) in a particular Academic Year shall also be considered for grant of NRI/ OCI/ PIO/ FN/ Children of Indian Workers in the Gulf Countries subject to fulfillment of norms of Approval Process Handbook 2018-19
- g. Institutions having an "Approved Intake" less than a Division size in any of the Regular/ First Shift Course(s) as prescribed by the Council may apply for Intake of full Division size themselves and shall maintain Faculty: Student ratio accordingly, without NBA accreditation/NOC from Affiliating University/ Board/ State Government/ UT; subject to "Zero Deficiency "based on Self-Disclosure in

the AICTE Web-Portal. However, this is not applicable in case of Institutions under penal action.

B. Merging of Regular Courses:

Merging of certain Regular Courses in Engineering and Technology in UG Degree is permitted as per Annexure-4 of AICTE's Approval Process Handbook 2018-19 (Enclosed) Merging is considered for all divisions of a Course while partial merging of few divisions is not permissible so that the Intake after merging shall be equal to the sum total of the individual Courses and divisions, subject to the condition that total number of divisions after merging per Course shall not exceed THREE Divisions, provided the faculty student ratio to be maintained.

8. PRE REQUISITE FOR PERMANENT AFFILIATION:

- a) College shall be eligible for permanent affiliation in any Course / Subject after enjoying temporary affiliation for a continuous period of five years in that course / subject and has fulfilled all the conditions of affiliation and attained the academic and administrative standards prescribed by the University from time to time.
- b) College shall have 2(f) status.

Important Note:

All the colleges are required to maintain norms and standards of VTU/AICTE, prescribed from time to time.

In case the previous Local Inquiry Committee has reported any short fall, the institutions shall comply with same.

Better norms between AICTE and CoA should be adopted

REGISTRAR