

Affiliation for 2017-18
VTU Standards and Norms



VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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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. It is mandatory that, all institutions should necessarily fulfill these minimum infrastructural facilities and academic standards. The land, building, faculty, classroom computational & library facilities etc required as a function of students strength.

1. Institutional Governance:**a. Constitution of Governing Council/ Board of Governors**

This shall be as per AICTE

b. Rules and Regulations

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

2. Infrastructure:**NORMS FOR UG PROGRAMS:****A. LAND REQUIREMENT**

Category	Mega /Metro Cities *	Urban * \$	Rural *
Engineering & Technology	1.5 Acres/ or 6070.29 Sq.m.	2.5 Acres or 10117.15 Sq.m.	7.5 Acres or 30351.45 Sq.m.
Architecture	1.5 Acres/ or 6070.29 Sq.m.	2.5 Acres or 10117.15 Sq.m.	7.5 Acres or 30351.45 Sq.m.
Town Planning	1.5 Acres/ or 6070.29 Sq.m.	2.5 Acres or 10117.15 Sq.m.	7.5 Acres or 30351.45 Sq.m.

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

\$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.

B. NORMS FOR INFRASTRUCTURE**I. Instructional Area # :****A Engineering & Technology**

Particulars		Area Sq. m.	Minimum Number of Rooms/Intake							
			240	300	360	420	480	600	660	720
Class Rooms &&	UG [(TU/240)*3]*4	66 Sq.m. /Room	12	15	18	21	24	30	33	36
	PG	33 Sq.m. /Room	2 Rooms / Course							
Tutorial rooms		33 Sq.m. /Room	3	4	5	5	6	7	8	9
Drawing Hall (For Civil Engg. Only)		132 Sq.m.								
Computer Centre		150 Sq.m.								
Workshop		200 Sq.m. + X ##								
Laboratories	UG	66 Sq.m. /Room	6/Course + 4 /Course if Intake for the course is more than 120							
	PG	66 Sq.m. /Room	2 / Specialization (1 Regular Lab + 1 Research Lab)							
Physics Lab		66 Sq.m.								
Chemistry Lab		66 Sq.m.								
CCP Lab		150 Sq.m.								
CAED Lab		150 Sq.m.								
Library & Reading Room		400 Sq.m. **								
Seminar Halls		132 Sq.m./Room	3	4	5	5	6	7	8	9

&& Number of Class Rooms Required shall be one class room per division. (1 Division = 60 Students)

X## Two Additional workshops for Mechanical, Production, Civil, Electrical, Chemical, Textile, Marine, Aeronautical courses.

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

10% variation in Area is permitted.

Note:

1. The areas of certain common / inter disciplinary laboratory facilities are allowed to be shared subjected to the total strength of 120 students from the departments sharing these facilities put together.

2. 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.
3. For **New Institutions** number of class rooms required shall be calculated as $C = ND*0.75$, where ND is number of divisions.

B). For Architecture and Town Planning:

Particulars		Area Sq. m.	Minimum Number of Rooms/Intake		
			60	120	180
Class Rooms	UG	66 Sq.m. /Room	5	10	15
	PG	33 Sq.m. /Room	1/Specialization		
PG Studio		66 Sq.m. /Room	1/Specialization		
Model making and Carpentry Workshop		132 Sq.m.			
UG Studio/ Material Museum		132 Sq.m. /Room	5		
Computer Centre		75 Sq.m.			
Library & Reading Room		150 Sq.m.			
Seminar Hall		132 Sq.m.			

II. Administrative Area

Sl No.	Particulars	Area in Sq. m.
1.	Principal's room	20
2.	Head of Dept	10
3.	Department Office	20
4.	Faculty room	5 x n*
5.	Departmental Library	Desirable
6.	Store room	30
7.	Conference room	100
8.	Maintenance/Estate office	10
9.	Reception Office	25
10.	College Office	150/300**
11.	Board room	20
12.	Security	10
13.	House keeping	10
14.	Examination Office	30
15.	Placement	50
16.	Pantry for Staff/ Faculty Common Room	10

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

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

III. Amenities:

Sl No.	Particulars	Area in Sq. m.
1.	Sports field/Games/Gymnasium	200
2.	Boy's Common Room	100
3.	Girl's Common Room	100
4.	Cafeteria	150
5.	Toilets	350
6.	First Aid & Medical Room	10
7.	Stationery Store and Reprography	10
8.	Auditorium/ Amphi Theater	400

IV. Library facilities:

No. of Titles	UG	100 /Course	After the completion of 4 years of establishment of the course 25 % of the titles shall be added every year for per course.
	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.
No. of Volumes	UG	500/Course	After the completion of 4 years of establishment of the course 250 volumes shall be added every year for per course.
	PG	200 /Course	After the completion of 4 years of establishment of the course 100 volumes shall be added every year for per course.
National Journals		06 /Division # (One Division = 60 Intake)	
International Journals		Desirable	
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 facility at the library is essential.*
5. *Computerized indexing with bar coded / RF tagged book handling is desired.*
6. *33% of total number of titles and volumes each can be in the form of e-books.*
7. *Sharing of Journals across UG/PG departments is permitted.*

V. Computing Facilities:

No. of PCs	UG	PC : Students :: 1: 6	
	PG	PC : Students :: 1: 4	
Hardware Specification		Dual core and above	
No. of Terminals on LAN/WAN		All (Minimum of 75%)	
Relevant legal Software		3	
Relevant Application Software		20	
Peripherals (printer/Scanner/Plotter)		1:5	
Internet speed	Intake		Speed
	< 300		16 Mbps
	300 – 600		32 Mbps
	600 – 900		48 Mbps
	900- 1500		64 Mbps
	>1500		100 Mbps
Facility for online QPDS		Adequate number of Printers, Computers, 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. *Every department will have separate computer laboratory with at least 20 computers.*
4. *A centralized computer laboratory with at least 100 computers.*
5. *Secure Wi-Fi facility highly recommended.*
6. *Purchase of most recent hardware is desirable.*
7. *Adequate number of software licenses is required for legal software.*
8. *At least 2Mbps internet speed/ per student shall be made available for viewing e-content from NPTEL/ SWAYAM etc.*
9. *At least 4Mbps Wi-Fi connectivity at 4 or 5 hotspots shall be made available*

4. Teaching :**A). Faculty Requirement:****For UG Programs**

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 : 15													
DEPARTMENT WORK LOAD (X)						I YEAR WORK LOAD (Y)							
Sl. No.	Dept.	Intake				Intake							
		30	60	90	120	240	300	360	420	480	540	600	
1	E&C	1:2:3	1:2:6	2:4:10	2:4:12	1	1	1	2	2	2	2	
2	CSE	-do-	-do-	-do-	-do-	1	1	2	2	2	3	3	
3	CV	-do-	-do-	-do-	-do-	1	1	1	2	2	2	2	
4	EE	-do-	-do-	-do-	-do-	1	1	1	2	2	2	2	
5	Mech	-do-	-do-	-do-	-do-	2	2	2	4	4	5	5	
6	Others	-do-	-do-	-do-	-do-	-	-	-	-	-	-	-	
7	Che	-	-	-	-	2	2	3	4	4	5	5	
8	Phy	-	-	-	-	2	2	3	4	4	5	5	
9	Maths	-	-	-	-	4	4	4	5	6	7	7	

*Faculty: Student Ratio shall be maintained at **1 : 15**

For Architecture and Town Planning Programs:

Qualification: As per AICTE Norms				
Principal/Director: 1(To include as professor if eligible)				
Cadre Ratio : Professor : Associate Professor : Assistant Professor				
Faculty: Student ration :: 1 : 10				
Intake				
UG	30	60	90	120
	1 : 4 : 10	2 : 8 : 20	3 : 12 : 30	4 : 16 : 40
PG	15	30	45	60
	1 : 1 : 1	2 : 2 : 2	3 : 3 : 3	4 : 4 : 4

For PG Programs

Qualification: As per AICTE Norms			
Cadre Ratio : Professor : Associate Professor : Assistant Professor			
	Intake		
M.Tech. #	18	24	48
	1 : 1 : 1	1 : 1 : 2	2 : 3 : 3
MCA ##	Intake		
	60	120	180
	1 : 3 : 8	2 : 6 : 16	3 : 9 : 32
MBA ##	1 : 2 : 5	2 : 4 : 10	3 : 2 : 15

Faculty : Student :: 1 : 12

Faculty : Student :: 1 : 15

Note:

1. For the calculation of departmental staff- student ratio, the total number of faculty required is X.
2. Y number is additional faculty required to cater to first year work load.
3. For an intake > 420 students, there should be at least one Professor and one Associate Professor and Y-2 Assistant professors in Physics, Chemistry and Mathematics departments.
4. There shall be separate qualified faculty to teach CIP/ CIV/ English/ Kannada
5. For the desired Faculty Student ratio, a minimum of 80 % should be regular/full time faculty and the remaining may be Adjunct Faculty / Resource persons from industry having minimum of 5 years experience.

VII. Technical supporting Staff :

Foreman / Supervisor	1 Per Program	
Instructor /Assistant Instructor/ Mechanic	1 Per Laboratory	
Helper	1 Per Laboratory	
Central Computer Centre	System Analyst	1
	Programmer	4
Technical Assistant	1 Per PG Program	

5. Other Norms :**A. Increase in Intake / Starting of New course:**

The new programs or increase in Intake will be considered only if the requirements for exiting courses are satisfy to an extent of > 85%. Starting of New Program will be permitted as per AICTE norms. Increase in intake will be considered only if the program is accredited by NBA, however Institutions having an "Approved Intake" less than a Division size in any of the Regular/ First Shift Courses as prescribed by the AICTE may apply for Intake of full Division size and shall maintain faculty student

ratio accordingly, without NBA accreditation.

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 2017-2018 (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.

C Norms for recognition of New Research Centers Continuation / Extension

- i. At least one Undergraduate / Post Graduate batch must have been passed out from the Department. Except, in case of Basic Science departments.
- ii. The department shall satisfy the Faculty cadre as per norms.
- iii. There shall be at least a Professor available with Ph.D. degree.
- iv. The research guide shall be less than 62 years of age with minimum 3 research publications in the last three years in the same institution.
- v. Other conditions specified under the Regulations governing Recognition of Research center and Research Guides shall be followed as per RS1.

D Norms for Continuation / Extension of existing Research Centers

- i. The department shall satisfy the Faculty cadre as per norms.
- ii. Other conditions specified under the Regulations governing Recognition of Research center and Research Guides shall be followed as per RS2.

E 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.
