Affiliation for 2019-20

## VTU Norms and Standards



Estd: 1998

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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 8000 Sq. m. |
| :--- | :--- |
| Town Planning |  |

*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

| Particulars |  | Area Sq. m. | Minimum Number of Rooms/Intake |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |
| Class Rooms * | UG |  | 66 Sq.m. /Room | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
|  | PG | 33 Sq.m. /Room | 2 Rooms / Course |  |  |  |  |  |  |  |  |
| Tutorial Rooms (Optional) |  | 33 Sq.m. <br> /Room | 3 | 4 | 5 | 5 | 6 | 7 | 8 | 8 | 9 |
| Drawing Hall |  | 132 Sq.m. | Desired ( As per curriculum) |  |  |  |  |  |  |  |  |
| Computer Centre |  | 150 Sq.m. | Can be used as CCP Lab / CAED Lab/ Language Lab) |  |  |  |  |  |  |  |  |
| Workshop |  | 200 Sq.m. |  |  |  |  |  |  |  |  |  |
| Laboratories | UG | 66 Sq.m. / Room |  | 6/Course |  |  |  |  |  |  |  |
|  | PG | 66 Sq.m. / Room |  | 2 / Specialization |  |  |  |  |  |  |  |
| Physics Lab |  | 150 Sq.m. |  |  |  |  |  |  |  |  |  |
| Chemistry Lab |  | 150 Sq.m. |  |  |  |  |  |  |  |  |  |
| Library \& Reading Room |  | 400 Sq.m. ** |  |  |  |  |  |  |  |  |  |
| Seminar Halls | UG | One/ 2 UG Courses |  |  |  |  |  |  |  |  |  |
|  | PG | One/ PG Courses in the department |  |  |  |  |  |  |  |  |  |

** 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)

| Particulars |  | Area Sq. m. | Minimum Number of Rooms/Intake |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 40 | 80 | 120 |
| Class <br> Rooms * | UG |  | 66 Sq.m. /Room | 4 | 8 | 12 |
|  | PG | 33 Sq.m. /Room | 1/Specialization |  |  |
| UG Studio |  | $\begin{aligned} & 120 \\ & \text { Sq.m. } \end{aligned}$ | 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. / Room | 2/Course |  |  |
| Library \& Reading Room |  | 150 Sq.m. |  |  |  |
| Seminar Halls |  | One per Program |  |  |  |

* Number of Class Room = (Number of Divisions/Year $\times$ Duration of the Course) $\times 0.75$ \# 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

| Particulars |  | Area <br> Sq. m. | Minimum Number of Rooms/Intake |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1^{\text {st }}$ Year | $2^{\text {nd }}$ Year |  |  | 3rd Year |  |  | $4^{\text {th }}$ Year |  |  | $5^{\text {th }}$ Year |  |  |
|  |  | 40 | 80 | 120 | 40 | 80 | 120 | 40 | 80 | 120 | 40 | 80 | 120 | 40 | 80 | 120 |
| Class <br> Rooms | UG |  | $\begin{array}{\|c\|} \hline 60 \\ \text { Sq.m. } \\ \text { /Room } \\ \hline \end{array}$ | 1 | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 4 |
|  | PG |  | 33 Sq.m. Rom | Minimum one/ Specialization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| UG Studio |  | $120$ | 1 | 2 | 3 | 2 | 4 | 6 | 3 | 6 | 9 | 4 | 8 | 12 | 4 | 8 | 12 |
| PG Studio |  | $\begin{aligned} & 66 \\ & \text { Sq.m. } \end{aligned}$ | Minimum one/ Specialization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compute Centre |  | 60 Sq.m. | Minimum one |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Laborato and Worksho |  | $\begin{aligned} & \text { 40Sq.m. } \\ & \text { each } \end{aligned}$ | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 |
|  <br> Reading <br> Room |  | 0.6 Sq.m./Student up to total sanctioned strength of 200 and 0.3 Sq.m. for every additional beyond sanctioned strength of 200 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

2. Administrative Area

| Sl No. | Particulars | Area in Sq. m. <br> (As per AICTE) | Area in Sq. m. <br> (As per CoA) |
| :---: | :--- | :---: | :---: |
| 1 | Principal's room | 30 | 30 |
| 2 | Head of Dept | 10 | NS |
| 3 | Department Office | 20 | NS |
| 4 | Faculty room | $5 \mathrm{x} \mathrm{n}^{*}$ | Prof.- 12 Sq.m. each <br> Assoc. Prof.- 12 Sq.m. each <br> Asst.Prof.- 6 Sq.m. each |
| 5 | Store room | 30 | NS |


| 6 | Maintenance/Estate <br> office | 10 | NS |
| :---: | :--- | :---: | :---: |
| 7 | Reception Office | 25 | NS |
| 8 | College Office | $150 / 300^{* *}$ | 60 Sq.m. |
| 9 | Board room | 20 | NS ${ }^{\text {a }}$ |
| 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
** 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


## 3. Amenities:

| Sl No. | Particulars | Area in Sq. m. <br> (As per AICTE) | Area in Sq. m. <br> (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 |  | Engg. \& Technology |  | Architecture \& Town <br> Planning |  |
| :--- | :---: | :---: | :--- | :---: | :---: |
| No. of Titles | UG | $100 /$ Course | 50 titles shall be added <br> every year per course | 100 | 50 titles shall <br> be added every <br> year |
|  | PG | $50 /$ Course | After the completion of 2 <br> years of establishment of <br> the course 10\% of the <br> titles shall be added <br> every year for per course | 50 | As required |


| No. of Volumes | UG | $500 /$ Course | 250 volumes shall be added <br> every year per course | 400 x <br> Number of <br> Divisions | 400 x Number of <br> Divisions to be <br> added every year |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | PG | $200 /$ Course | 100 volumes shall be added <br> every year for per course | 100 | 100 to be added <br> for <br> additional <br> division |
| National Journals | $06 /$ Division |  |  |  |  |
| International <br> Journals | Desirable for UG Programs <br> 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 <br> /Year | I |  | II |  | III |  | IV |  | V |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Internat <br> ional | Iatio <br> nal | Internat <br> ional | Natio <br> nal | Internat <br> ional | Natio <br> nal | Internat <br> ional | Natio <br> nal | Iternat <br> ional | Natio <br> nal |
| 40 | 1 | 4 | 1 | 4 | 2 | 6 | 2 | 8 | 2 | 8 |
| 80 and <br> 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:



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

| DEPARTMENT WORK LOAD (X) |  |  |  |  |  |  | I YEAR WORK LOAD (Y) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sl.No. | Dept. | Intake |  |  |  |  | Intake |  |  |  |  |  |  |  |  |
|  |  | 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- | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 |
| 5 | Mech. | -do- | -do- | -do- | -do- | -do- | 2 | 2 | 2 | 4 | 5 | 5 | 5 | 6 | 6 |
| 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

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

\# Faculty : Student :: 1:12
\#\# Faculty : Student :: 1: 10
** Faculty : 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 $2^{\text {nd }}$ shift course may use $50 \%$ of Regular faculty and remaining $50 \%$ of faculty must be appointed exclusively for $2^{\text {nd }}$ 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 |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  |  | 40 | 80 | 120 |  |
| 1 | Librarian | 0 | 1 |  |  |
| 2 | Asst. Librarian | 3 | 3 | 1 |  |
| 3 | Lab/ Workshop Technician | 5 | 9 | 5 |  |
| 4 | Administrative personnel | 4 | 4 | 10 |  |
| 5 | Accounts personnel | As required |  |  |  |
| 6 | Helpers |  |  |  |  |

## 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.

