

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

SSM College of Engineering provides state of art infrastructure to the students to become a globally recognized centre of excellence for science, technology & engineering education, committed to quality Teaching-learning process.

- Institute has a sprawling campus over 10.5 acres of land with splendid buildings, technology enabled classrooms and excellent infrastructure for providing a learner-centric environment. The college has a progressive approach for creation and enhancement of the infrastructure which facilitate effective teaching-learning process.
- The campus has 08 blocks viz Administration, Humanities and Computer Science Engineering, Physics and Chemistry, Electronics and Communication & Electrical Engineering, Civil and Mechanical Engineering, Business School and Computer Application, Central Workshop besides other structures like hostels, canteens, bank etc.
- The facilities of the college like classrooms, tutorial rooms, ICT enabled smart classrooms, laboratories, library, digital library and seminar halls are also constantly upgraded to meet the desired requirements.
- The Institution ensures adequate availability and optimal utilization of physical infrastructure as it is critically linked with the vision of the College to create an environment of excellence in education through technologically advanced pedagogical tools.
- Optimal deployment of infrastructure is ensured through conducting workshops/training programmes for faculty.
- Optimal utilization is ensured through encouraging innovative teaching learning practices.
- Provides facility for conducting prestigious online examinations like GATE, GMAT, NEET, Banking and other competitive examinations of Government and other organizations.

Infrastructural facilities for academics: -

Facilities	Total Numbers	Area in Square meters
Class Rooms	103	5850
Laboratories/Labs/ Computer Labs	49	2940
Seminar Halls/ Conference Rooms	1	170
Staff Rooms & HOD Rooms	29	478
Workshop	1	430
Drawing Halls	1	170
Library	3	650

Computing facilities: -

S.No	Computing facility	Total Numbers
1	Computer Systems	583

Co-curricular activities: -

- The College promotes myriad co-curricular activities to expand the knowledge of the students beyond the
- Curriculum and to provide industrial exposure.
- Our college has 1 auditorium and 1 seminar hall for conducting various co-curricular activities. The college organizes several seminars, invited talks, workshops, symposiums, project based technical events, Faculty Development Programs (FDP) related to emerging technologies to keep everyone updated in their respective fields.

3. Laboratories

- The laboratories are equipped with state-of-the-art equipment and are more than sufficient to conduct the experiments as per the Kashmir University (KU) curriculum.
- The programming laboratories are equipped with licensed software as per the KU regulations.
- In addition to the regular curriculum, students are encouraged to pursue their project work and conduct many case studies in the emerging areas of research.

File Description	Document
Any additional information	View Document

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor), gymnasium, yoga centre etc., and cultural activities**Response:****Sports Facilities**

- The College has excellent facilities for both outdoor and indoor games. Outdoor courts are available for Basketball, Badminton, Cricket and Football.
- Indoor facilities are available for snooker.
- College teams participate regularly in these sports and have won numerous intercollegiate events. Interdepartmental competitions, as well as athletics, give ample opportunities for students to take part in outdoor activities.

Outdoor Sports Facilities

- Basketball
- Badminton
- Cricket
- Football
- Volleyball

Indoor Sports Facilities

- Snooker

Facility for Sports

Sr. No.	Facility Available	Details of the Facility Available
1	Sports Ground	Sports ground is used for outdoor games like Cricket field available - 01 Basket Ball Courts - 01
2	Indoor Games	Snooker-01
3	Badminton Court	Badminton Court -01
4	yoga	Yoga centre -01

Cultural Activities

- SSM College of Engineering is very famous for organizing various cultural events which have gained popularity in all social circles of the Valley many of the events are available on YouTube and had large viewers. The Institution encourages the students to participate in various cultural activities and make the students excel in their fields of interest. The Institute has produced nationally acknowledged artists like Rayees Mohi-ud-din (Host KBC Koshur, Bollywood actor, writer, producer, Director) Raja Adam (Kashmir's first magician, India kay mast Kalandar awardee, and runner up in India's got talent).
- Institute conducts various cultural activities like "E-tonner", Art Exhibitions and Competitions.
- Students participate in Engineer's Youth Festival, debate competition like Gender equality etc.
- They take part in cultural events at district level like Sonzal and Tech-fest (LPU-Jalandhar) where they showcase their talents.

Facility for Cultural events

Sr. No.	Facility Available	Details of the Facility Available
1	Open air theatre	1328.62 Sq.m open to air theatre is made available on the campus.
2	Seminar hall/Auditorium	170 Sq.m, 1 closed hall is available having seating capacity of 210 participants.

File Description	Document
Any additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc**Response:** 38.46

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 40

File Description**Document**

Number of classrooms and seminar halls with ICT enabled facilities

[View Document](#)

any additional information

[View Document](#)**4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.****Response:** 52.72

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
480	370	390	470	470

File Description**Document**

Details of budget allocation, excluding salary during the last five years

[View Document](#)

Audited utilization statements

[View Document](#)**4.2 Library as a Learning Resource****4.2.1 Library is automated using Integrated Library Management System (ILMS)****Response:**

Name Of ILMS software	SOUL and INFLIBNET
Nature of automation	partial
Version	Soul 2.0 & INFLIBNET
Year of Automation	2013

File Description	Document
Any additional information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

The library is an integral part of the intellectual power of our college. The library has an area of 650 Sq.mts and seating capacity for about 100 readers.

- Library holds over 51,798 books, 300 print journals, provides access to electronic resources, Newspapers and business magazines, and 1500 multimedia resources.
- College have institution membership of NDL.
- Library is Wi-Fi enabled and under CCTV surveillance
- Library gives the facilities like Circulation service, reference service, and reprographic service, document scanning, document printing, NPTEL lectures and news paper clippings.
- Library has periodicals like 300 journals, 1000 magazines, 2000 News Papers.
- Library have non-book Materials like 1500 CD-ROMS and DVDs and 750 project reports.
- Library has 91 rare books.
- Library Collection

Description	Details	
	Titles	Volumes
UG/Course –Book Details		
Electronics and Communication Engineering	3000	10100
Computer Science and Engineering	3200	10627
Civil Engineering	2513	9000
Electrical Engineering	1870	3060
Mechanical Engineering	1800	7000
MBA	500	3355
MCA	1000	6000
Humanities	200	2656
Total	14083	51798

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: C. Any 2 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 18.98

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
7.28	7.56	36.39	7.285	36.39

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: No

4.2.6 Percentage per day usage of library by teachers and students

Response: 7.81

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 248

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

In the entire campus, the LAN connects all the computers with 100 Mbps speed capacity leased line provided by CNS infotel Services Pvt Ltd.

- Wi-Fi connectivity is provided in the administrative and academic areas. Surplus Ethernet ports are provided all over the campus, for laptops/devices in need of internet connectivity.
- Computer laboratories are equipped with state-of-the-art technology and are available to all the staff and students.
- Licensed Antivirus is used to enable the security of the computers. Our college has 583 computers and all the departments have software packages as per the curriculum needs.
- The institute upgrades the software packages and also purchases software currently being used in the industry to make the students, industry ready.
- A separate team with in-house staff takes care of the IT related needs of the campus such as Hardware and networking.

Up-gradations in IT Facilities are mentioned below.

Wi-Fi Facility:

- **Name of the Internet provider:** CNS infotel Services Pvt Ltd.
- **Available Bandwidth:** 100 Mbps
- **Wi-Fi Availability:** Available in administrative and academic blocks
- **Internet access in labs, library, classrooms, and offices of all department:** 649 Nodes

Server Details:

Server Name	System Configuration
1 U Rack Server 3250	Brand : IBM Processor: Intel Xenon QUAD core @ 3.1 GHz Memory: RAM 8GB. Hard Disk:500GB
SSM/MCA/Server_01	Brand: IBM

	Processor: Intel(R)XEON(R) CPU E31220 @3.10 Memory: RAM:4 GB HardDisk:500GB	
SSM/CSE/Server_01	Brand: IBM XEON Processor: Octacore Memory: RAM-8GB Hardisk-500GB	
SSM/CSE/Server_02	Brand: HP Processor: Quad Core Memory: RAM-4GB Hardisk-320GB	

4.3.2 Student - Computer ratio

Response: 5.18

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)**Response:** Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document

4.4 Maintenance of Campus Infrastructure**4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years****Response:** 2.91

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
17.70	17.18	15.65	30.86	36.31

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.**Response:**

- 1.The college has appointed personnel for maintaining facilities such as buildings, transport, electrical, gardening etc.
- 2.Separate complaint registers are maintained for various services.
- 3.Regular cleaning of college floors, classrooms, laboratories, equipment, and restrooms are being done by the housekeeping team.
- 4.Stock verification of all labs and other facilities is done at the end of every year by the staff members from other department and the report is submitted to the Principal.

Maintenance of Laboratory Equipment

- 1.Periodical check-up of equipment is carried out as per schedule by the lab coordinators The measuring instruments are calibrated regularly.

2. In addition, maintenance is being done weekly, monthly and yearly and respective registers are maintained in the laboratories
3. As per the requirement, minor repairs are carried out by the lab instructors or faculty member.

Major repairs for all laboratory equipment are outsourced by following the procedure as follows:

1. The service request is forwarded to HOD through Lab-in-Charge.
2. After approval, the department calls the person for the same.
3. After approval, the service is carried out in the presence of Lab-in-Charge
4. After service, the work completion statement and bills are maintained for record.

Maintenance of Computer Laboratories

1. Maintenance of computers is taken care by an in-house IT admin team.
2. Preventive maintenance and breakdown maintenance procedure is followed. A weekly status check on the hardware and software condition of the machines is undertaken.
3. Breakdown maintenance wherein the system fails due to SMPS problem or boot failure is maintained. If the problem is minor, the technical support staff of the lab will rectify it. For major failures, support from the vendor is taken.
4. Periodic maintenance is done by regular cleaning of the lab spaces, software updates.

Vehicle Maintenance

1. Preventative maintenance is performed daily which includes fuel and fluid level checks.
2. Breakdown maintenance is carried out for worn-out components by sending for repair or replacement.
3. Vehicle records with all maintenance tasks performed, vehicle miles and emission control reports are maintained

Library Maintenance

1. Library maintenance involves continuous **observance** and verification of the stack, **showing of latest** material on the display racks and arrangement of the books on the racks.
2. Also, the book materials are cleaned at periodic intervals to reduce the damage caused by dust, insects and pest infestation.

Sports Infrastructure Maintenance:

1. Indoor and outdoor sports infrastructure facilities are properly maintained by the markers throughout the year.
2. Playfield and sport equipments are also maintained regularly.

Maintenance of sensitive equipment, power and water supply:-

Category	Capacity	Total Number	Maintenance AMC
Generator (Mahindra and	62.5KVA	3	1) Staff itself 2) Rahim Motors

Mahindra)			
RO plant	40 litres	1	Blue Mount
Kent Elite-1	25 litres	1	
Stainless steel tank with Automatic Sensor for Auto On and OFF	100 litres	1	
UPS	5KVA	2	By Solus company
UPS	10 KVA	9	By Solus company
UPS	10 KVA	1	By Microtech
UPS	10 KVA	3	By Sukam
File Description		Document	
Any additional information		View Document	