



Royal University of Bhutan  
Jigme Namgyel Engineering  
College

Dewathang: Bhutan

# Student Handbook

2019

Jigme Namgyel Engineering  
College

Dewathang: Bhutan

# Student Handbook

2019

All the information in this handbook is true at the time of printing. The college reserves the right to change any content without prior notice.

## Personal Memoranda

Name: \_\_\_\_\_

Department: \_\_\_\_\_

Year: \_\_\_\_\_

Enrolment No: \_\_\_\_\_

Identity Card No: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Blood Group: \_\_\_\_\_

E-mail: \_\_\_\_\_

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## 1. Introduction

### 1.1 Background to the College

The Jigme Namgyel Engineering College (JNEC), formerly known as the Royal Bhutan Polytechnic (RBPoly), is one of the constituent colleges of the Royal University of Bhutan. The College is situated at around 900m above the mean sea level on the west end of Dewathang town, 18 kilometers away from Samdrup Jongkhar town, second gateway to Bhutan from Assam in India.

The College started with the infrastructure development works since 1972, coinciding with the 3<sup>rd</sup> Five Year Development Plan of the country and the enrolment of students for the Diploma level programmes in engineering started from 22<sup>nd</sup> February 1974. At the initial stage of its development, the College offered Diploma programmes in Civil and Electrical Engineering. The Diploma programme in Mechanical Engineering was introduced in 1988. The College also offered certificate in Surveying programme from 1974 to 1978 and 1986 to 1990 in addition to Certificate in Draughtsman from 1986 to 1990. The enrolment into certificate level programme was discontinued from 1988. JNEC was the only tertiary level institute providing education in engineering till 2001 with the mandate to meet the engineering manpower requirement of the country.

In April 2000, the then Royal Bhutan Polytechnic was temporarily shifted to Rinchending, Phuentsholing due to security reasons in south eastern part of the country and continued to offer Diploma in Civil, Electrical and Mechanical Engineering programmes from the then Royal Technical Institute, Rinchending campus. While at Rinchending campus, two programmes at the Bachelor's level (Bachelor of Engineering in Civil Engineering and Bachelor of Engineering in Electrical Engineering) were introduced in August 2001 and the institute was re-named as Royal Bhutan Institute of Technology (RBIT), the present College of Science and

Technology (CST). With the establishment of the Royal University of Bhutan in June 2, 2003, JNEC (the then RBIT) became one of the constituent colleges of the Royal University of Bhutan (RUB).

In June 2006, the Diploma programmes offered at RBIT were relocated to its original campus in Dewathang. In August 2006, the College was renamed as **Jigme Namgyel Polytechnic (JNP)**. The name of the College “Jigme Namgyel Polytechnic” and its location in Dewathang has deep roots with the history of Bhutan.

From July 2006, the Diploma programmes were reviewed and the duration of the programmes were reduced from three years to two and half years with increased entry level from Class X pass to Class XII pass science students. In 2012, the Diploma programmes were again reviewed and the duration of the programmes were reduced from two and half years to two years as per the RUB regulations.

To keep pace with the infrastructural development activities in the country and to meet the increasing demand for technical graduates, the enrolment of students in all the programmes were increased by almost 100 percent from 2006 to 2011. Further, new programmes were developed on priority basis based on the need of the country and therefore, five new programmes were introduced from 2010 to 2015 including the first Bachelor’s degree programme in Dewathang campus. Accordingly, on 27<sup>th</sup> October 2015, the name of the college was changed to Jigme Namgyel Engineering College (JNEC) with the inauguration of the Bachelor of Engineering in Power Engineering programme.

The College aspires to become the centre of excellence in providing Diploma level programmes in Engineering, Technology and Management, selected applied Bachelor level programmes, continuing education programmes, material testing and certification, research, consultancy and community services through various modes of delivery including distance education. Currently, JNEC offers eight programmes, seven at Diploma level



and one at Bachelor's level. The College has plans to introduce a Bachelor of Engineering in Mechanical Engineering in 2019 and continue to develop and offer several new programmes within the 12<sup>th</sup> Five Year period based on the need of the country as well as in consultation with the esteemed stakeholders.

The programmes offered at JNEC are targeted to meet the engineering manpower requirement of the country, including the country's infrastructure development activities. College is accredited Grade A (Very Good) by Bhutan Accreditation council in 2018.

In line with the growth in the country's GDP and the living standard of people, there would be increased demand for better infrastructure facilities and resources. The graduates of JNEC will have to respond to such demands. Therefore, the programmes at JNEC are targeted towards assisting the developmental activities as well as enhance the employability scope of Bhutanese youths.

## **1.2 College Vision, Mission, Core Values & key Aspiration**

### **Vision**

A premier Institute of applied engineering, management and technology towards developing highly competent and innovative technical personnel infused with the values of Gross National Happiness.

### **Mission**

- 1) To provide quality education, driven by GNH values, in the field of applied engineering, management and technology that are current and beneficial to individuals, employers and the nation;
- 2) To provide resourceful services through professional development training, consultancy and expert services;
- 3) To conduct research & innovation in relevant areas; and
- 4) To develop active linkages with organizations and academic institutions both within and outside the country.

### **Core Values**

#### **CREATE**

- i) Commitment
- ii) Responsiveness
- iii) Excellence
- iv) Accountability
- v) Teamwork
- vi) Ethics

### **Key Aspiration**

- i) JNEC as the most preferred destination for Bhutanese and international students for applied engineering and management studies.
- ii) JNEC graduates recognized by job markets and universities both within and outside the country.
- iii) JNEC recognized for undergraduate and postgraduate programmes that are applied and specialized.

- iv) JNEC as a resource for the community and the nation with research centers that caters to the need of the vibrant society.
- v) JNEC as a model higher education institute where programmes are infused with the values of GNH.
- vi) JNEC campus with state of the art facilities and comprehensive student support services.
- vii) JNEC with enabling work culture and values and motivated staff.
- viii) JNEC with strong culture for entrepreneurship and graduates inspired to be entrepreneurs.

### **1.3 College Management Structure**

The college management consists of the following Units.

1. Administration and Finance Division
2. Department of Civil Engineering and Surveying
3. Department of Electrical Engineering
4. Department of Electronics and Communication Engineering
5. Department of Mechanical Engineering
6. Department of Information Technology
7. Department of Humanities and Management

The college is headed by the President with three Deans, Administrative and Finance personnel's directly under him.

The three Deans are:

1. Dean of Academic Affairs (DAA)
2. Dean of Student Affairs (DSA)
3. Dean of Research and Industrial Linkages (DRIL)

#### **Dean of Academic Affairs (DAA)**

The Dean of Academic Affairs looks after all the affairs related to Academic and HR issues in the following functional units:

1. Department of Civil Engineering and Surveying
2. Department of Electrical Engineering
3. Department of Electronics and Communication Engineering
4. Department of Mechanical Engineering

5. Department of Information Technology
6. Department of Humanities and Management
7. Exam Cell

The Dean of Academic affairs is also responsible for:

1. Overall planning of academic spaces and classes.
2. Overall Coordination and planning of faculty and staff in the departments
3. Coordination and conduct of Semester Examination, Programme Board of Examiners' meetings, College Academic Committee meetings.
4. Overall coordination and introduction of new programmes.

### **Dean of Student Affairs (DSA)**

The Dean of Student Affairs looks after all the affairs related to other student activities. All the student activities are looked after by the Student Affairs Team (SAT). The SAT consists of the following officials:

1. Dean of Student Affairs
2. Chief Residence Coordinator
3. Two male and one female Residence Coordinator
4. Mess Manager
5. Cultural Coordinator
6. Games & Sports Coach
7. Student Councilors

The Dean of Student Affairs is responsible for:

1. Admission & Registration of students
2. Food & Accommodation
3. Games, Sports & Recreation
4. Student Disciplines
5. Students' Leave
6. Co-curricular Activities
7. Student Support Services

### **Dean of Research & Industrial Linkages (DRIL)**

The Dean of Research and Industrial Linkages looks after the affairs related to all research activities in college and any issues related with external industry and organizations.

Also the DRIL is responsible for:

1. Overall coordination and planning of all the Research activities
2. Overall coordination and planning of students' industrial tours
3. Overall coordination and planning of students' On-the-Job Trainings.
4. Overall planning and coordination of student recruitment.
5. Overall planning and coordination of student career counseling and placement.
6. Establishing external linkages with other colleges/colleges within the country and outside.
7. Establishing external linkages with industry and organization within the country and outside.

For strategic management of the College, following committees are instituted to steer the College:

1. **College Management Committee (CMC)** – for overall guidance and development of the College
2. **College Finance Committee (CFC)** – for overall guidance, planning and monitoring of annual and long term budget requirement and implementation
3. **Procurement Committee** – for coordination and administration of property acquisition.
4. **Project Management Team (PMT)** – administration and management of infrastructure development.
5. **Human Resource Management Committee (HRMC)** – to take care of all HR related issues.
6. **College Academic Committee (CAC)** – for overall guidance and development of Academic programmes.
7. **College Sports Committee (CSC)** – overall coordination and development of sports in the college
8. **Disciplinary and Grievance Committee** – for resolving students' disciplinary issues.

## Faculty and Staff Details

		Name	Position Title	Qualification	Gender
<b>ADMINISTRATION</b>					
1	1	Dr. Andu Dukpa	President	PhD in Electrical Engineering	M
2	2	Shah Bir Rai	Dean Student Affairs	M.E Power Systems	M
3	3	Hemlal Bhattarai	Dean RIL	M. Tech Power & Energy Systems	M
4	4	Samten Lhendup	Dean Academic Affairs	Master in Industrial & Automation	M
<b>DEPARTMENT OF CIVIL ENGINEERING &amp; SURVEYING</b>					
5	1	Jigme Tenzin	Assc. Lecturer	M.Tech Remote Sensing & GIS	M
6	2	Tandin Wangchuk	Sr. Instructor	Diploma in Civil Engineering	M
7	3	Dawa Tshering	Assc. Lecturer	B.Tech. Civil Engg	M
8	4	Thonglay	Assc. Lecturer	B.E. Civil Engineering	M
9	5	Ayan Bhuyan	Assc. Lecturer	B.E. Civil Engineering	M
10	6	Phurba Tamang	Assc. Lecturer	B.E. Civil Engineering	M
11	7	Lobzang Dorji	Lecturer	Master in Structure Engineering	M
12	8	Vasker Sharma	Assc. Lecturer	M.Tech (Hydrology-Surface Water)	M
13	9	Indra Bdr. Chettri	Assc. Lecturer	B.E. Civil Engineering	M
14	10	Choten Tshering	Assc. Lecturer	B.E. Civil Engineering	M
15	11	Sanjit Kumar Bhattarai	Assc. Lecturer	B.E. Civil Engineering	M
16	12	Tashi Choden	Asst. Lecturer	B.E. Civil Engineering	F
17	13	Dorji Wangchuk	Technician	NTTI Certificate	M
18	14	Tshering Wangchuk	Technician	Certificate in Civil Construction (Masonry)	M
19	15	Dilli Ram	Technician	VTI Carpentry	M

		Dungana			
20	16	Choki Wangmo	Technician	VTI Masonry	F
21	17	Bhim Bdr. Galley	Technician	VTI Civil Engineering	M
22	18	Dorji Wangchuk	Technician	VTI Masonry	M
23	19	Tshering Choki	Instructor	Diploma in Surveying	F
<b>ELECTRICAL ENGINEERING DEPARTMENT</b>					
24	1	P.R. Sharma	Asst. Professor	Post Graduate Program in Management	M
25	2	Chenga Dorji	Lecturer	M. Tech. Power Systems	M
26	3	Bikram Chhetri	Lecturer	M. Tech. Power systems	M
27	4	Jagat Bahadur Ghalley	Assc. Lecturer	B.Tech. Electrical & Electronics Engineering	M
28	5	Sonam Dorji	Lecturer	M.Tech Alternate Hydro Energy Systems	M
29	6	Karchung	Asst. Lecturer	B.E. Electrical Engineering	M
30	7	Thinley Tobgay	Asst. Lecturer	B.E. Electrical Engineering	M
31	8	Yeshe Seldon	Asst. Lecturer	B.E. Electrical Engineering	F
32	9	Chimi Dem	Asst. Lecturer	B.E. Electrical Engineering	F
33	10	Dheynay Zangmo	Asst. Lecturer	B.E. Electrical Engineering	F
34	11	San Maya Rai	Technician	Diploma in Electrical Engineering	F
35	12	Sangay Tshering	Technician	Certificate in Electrical Engineering	M
36	13	Karma Singye	Technician	Certificate in Electrical Engineering	M
37	14	Sangay Chozom	Technician	Certificate in Electrical Engineering	F
<b>ELECTRONICS &amp; COMMUNICATION ENGINEERING DEPARTMENT</b>					
38	1	Sangay Chedup	Lecturer	M. Tech Computer Science and Engineering	M

39	2	Bivek Subba	Assc. Lecturer	M.Tech Communication Systems	M
40	3	Deo Raj Biswa	Assc. Lecturer	B.Tech. Electronics & Communication Engineering	M
41	4	Srijana Gajmer	Assc. Lecturer	B.E. Electronics & Communication Engineering	F
42	5	Tandin Zangmo	Assc. Lecturer	B.E. Electronics & Communication Engineering	F
43	6	Sangay Dema	Technician	Diploma in Electronics & Communication Engineering	F
44	7	Rinchen Wangmo	Technician	Certificate in Electrical Engineering	F
<b>MECHANICAL ENGINEERING DEPARTMENT</b>					
45	1	Cheni Gambo	Asst. Professor	M.A. Agriculture	M
46	2	Karma Drukpa	Asst. Professor	M. E. Industrial Engineering	M
47	3	Norbu Tshering	Asst. Professor	M.Tech. Automotive Engineering	M
48	4	Norden Wangchuk	Lecturer	M. Tech. Industrial Design	M
49	5	Kala Tshering	Sr. Instructor	Diploma in Mechanical Engineering	M
50	6	Denten Zangpo	Sr. Instructor	Advance Diploma in Mechanical Engineering	M
51	7	Tandin Wangdi	Assc. Lecturer	B.E Mechanical Engineering	M
52	8	Karma Tshechu	Instructor	Advance Diploma (Mechanical Engg)	M
53	9	Sonam Tobgay	Technician	Certificate (Automobile Engg)	M
54	10	Tenzin Wangmo	Technician	Certificate (Mechanical Engineering)	F
55	11	Sangay Dorji	Technician	Certificate (Automobile Engg)	M
<b>HUMANITIES &amp; MANAGEMENT DEPARTMENT</b>					
56	1	Namgay Dorji	Lecturer	M. A English	M
57	2	Kul Prasad Sharma	Lecturer	M.Sc. Applied Mathematics	F



58	3	Jurmey Tshering	Lecturer	M.A Buddhist Studies	M
59	4	Pema Wangchuk	Assc. Lecturer	MBA Finance	M
60	5	Ngawang Namgyel	Assc. Lecturer	Msc. Mathematics	M
61	6	Thinley Wangmo	Asst. Lecturer	B.A. English & Geography	F
62	7	Wangmo	Asst. Lecturer	B.Com Finance	F
63	8	Kencho Wangmo	Asst. Lecturer	B.A. Language & Culture Studies	F
64	9	Sonam Gyeltshen	Lecturer	Msc. Applied Mathematics	M
<b>INFORMATION TECHNOLOGY DEPARTMENT</b>					
65	1	Tashi Wangchuk	Assc. Lecturer	B. Sc. Computer Science	M
66	2	Jamyang Tashi	Assc. Lecturer	M.Tech. Information Security & Cyber Forensics	M
67	3	Rinchen Tobgay	Assc. Lecturer	B.Sc. in Multimedia Technology & Animation	M
68	4	Sonam Wangmo	Assc. Lecturer	B. Sc. (Hons) Computer Science	F
69	5	Younten Tshering	Assc. Lecturer	B. Sc. (Hons) Computer Science	M
70	6	Sangay Tenzin	Asst. Lecturer	B.E. Information Technology	M
71	7	Dupthok Zangmo	Technician	Certificate in CHN	F
72	8	Sonam Phuntsho	Technician	Certificate in CHN	M
<b>ITSU</b>					
73	1	Sonam Jamtsho	Sr. ICT Officer	MSc. Computer Science	M
74	2	Phurba Dorji Nesor	ICT Technical Associate	DIMS	M
75	3	Tandin Dorji	Technician	Certificate in CHN	M
<b>CENTRAL LIBRARY</b>					

76	1	Dechen Dorji	Lib. Asst	Diploma in Library & Information Management.	M
77	2.	Sherab Tshomo	Lib. Asst	Class XII Arts	F
78	3	Tshering Yangzom	Lib. Asst	Class XII Arts	F
79	4	Tenzin Tshomo	Lib. Asst	Class XII Arts	F
80	5	Rinchen Pema	Lib. Asst	Class XII Science	F
<b>ADMINISTRATION, FINANCE &amp; ESTATE SECTION</b>					
81	1	Passang Dendup	Administration Officer	B.Sc. (Hons) Computer Science	M
82	2	Namgay Zangmo	Asst. Research Officer	B.E Civil Engineering	F
83	3	Phurpa Dema	Student Service Officer	B. A Political Science and Sociology	F
84	4	Phub Tshering	Student Service Officer	B.Com Accounting	M
85	5	Karma Tenzin	Student Service Officer	Bsc. Sustainable Development	M
86	6	Kinley Lhaden	Finance Officer	B. Com (Finance)	F
87	7	Phuba	Student Record Officer	B.Sc. Environment & Ecology	M
88	8	Yeshey Dem	Accounts Assistant	Diploma in Commercial Accounting	F
89	9	Tshewang Rigzin	Office Assistant	IOMP	M
90	10	Tshering	ADM Assistant	Class X (General)	F
91	11	Choten Dorji	Estate Manager	Diploma in Electrical Engineering	M
92	12	Karma Namgyel	Plumber	Certificate in Plumbing	M
93	13	Karma Cheku	Electrician	Certificate in Electrical Engineering	M
94	14	Karna Bdr Karki	Carpenter	Certificate in Carpentry	M
95	15	Budha Singh Rai	Mason	Certificate in Masonry	M
96	16	Sonam Zangmo	Messenger	Class X (General)	F

97	17	Mamta Kharka Chhetri	Site Supervising Engineer	B.E. Civil Engineering	F
98	18	Sonam Tashi	Driver		M
99	19	Galay Wangchuk	Driver	Certificate in Driving	M
100	20	Tandin Tshewang	Driver	Class VIII with Driving Licence	M
101	21	Pema Choden	PA to President	Class XII Commerce	F
<b>GSS</b>					
102	1	Tshendu Chojay	Cook	GSS	M
103	2	Tobgay	Cook	GSS	M
104	3	Sonam Phuntsho	Cook	GSS	M
105	4	Changlu	Cook	GSS	M
106	5	Sonam Gyeltshen	Cook	GSS	M
107	6	Jamyang Loday	Cook	GSS	M
108	7	Sangay Wangmo	Cleaner	GSS	F
109	8	Norbu Zangmo	Cleaner	GSS	F
110	9	Tashi Wangmo	Cleaner	GSS	F
111	10	Dechenla	S. Guard	GSS	M
112	11	Rinchen Penjor	S. Guard	GSS	M
113	12	Ngawang Thinley	S. Guard	GSS	M
114	13	Yeshe Dorji	S. Guard	GSS	M
115	14	Dorji Wangchuk	S. Guard	GSS	M
116	15	Sangay Dorji	S.Guard	GSS	M
117	16	Karma Dorji	Fitter	GSS	M
118	17	Tshering Namgyel	Gardener	GSS	M
119	18	Tshewang Pelmo	Care Taker	GSS	F
120	19	Tshering	Carpenter	GSS	M

# 1.5 Staff and Students Statistics

## Staff Statistics

STAFF	BHUTANESE	NON-BHUTANESE	GRAND TOTAL
TEACHING	55	1	56
ACADEMIC SUPPORT	45	0	45
GSS	20	0	20
TOTAL			121

## Student Statistics

	YEAR/GROUP												TOTAL
	FIRST			SECOND			THIRD			Fourth			
	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTAL	
BEPE	18	04	22	15	06	21	15	05	20	14	09	23	86
CIVIL	77	41	118	87	26	113							231
ELECTRICAL	32	10	42	37	8	45							87
MECHANICAL	34	04	38	38	11	49							87
CSN	15	12	27	20	14	34							61
ECE	10	09	19	22	13	35							54
SURVEY	11	12	23	23	13	36							59
DMPM	18	15	33	13	12	25							58
TOTAL	215	107	322	255	103	358							723

## **2. Student Admission and Enrollment**

### **2.1 University Admission System**

The students after their 12<sup>th</sup> standard are required to apply on-line in the RUB website for entry into RUB Colleges. Students are selected under following two broad categories:

- 1. Government Scholarship,**
- 2. Self-funding.**

The students with higher ranking as selected under the Government Scholarship. After the seats for Government Scholarships are filled, the remaining students are selected under the Self-Financed category still based on the merit ranking.

After that, the respective colleges select students based on the merit ranking calculated based on each college's ability ratings.

### **2.2 Entrance Requirements for B.E. in Power/Mechanical/Surveying & Geoinformatics Engineering.**

#### **2.2.1 Class XII pass Science Students (Pre-service candidates)**

A candidate seeking admission into the B.E. in Power Engineering programme has to fulfill the minimum entrance requirement set by the college which will be subjected to change. Minimum entrance requirement is Class XII passed students with a minimum of 50% each in Physics, Chemistry, Mathematics, English and pass in Dzongkha. Eligible candidates have to follow the selection procedure and admission criteria announced by RUB during the admission time. The following ability rating will be applied:

<b>Subject</b>	<b>Ability Rating</b>
Mathematics	5
Physics	5
Chemistry	4
English	3
other subject	1

#### **2.2.2 Diploma Graduates (In-service candidates)**

Candidates with Diploma in Electrical Engineering (EE) with a minimum of 55% and 24 months active service including

provisional period are eligible for entry into 2<sup>nd</sup> year of the programme under Accreditation of Prior Learning (APL). APL is provided to all modules of 1<sup>st</sup> Year B.E. Power Engineering programme as the 1<sup>st</sup> year modules are carefully designed as fundamental modules that would be covered in the first year of any diploma in electrical engineering programme. Candidates with a diploma from outside Bhutan will have to study and pass the following additional modules as compulsory non credited modules:

- i) Academic Skills, and
- ii) Dzongkha for Communication

This will enable the in-service candidate to complete the course in 3 (three) years duration. A further detail on the APL is provided in Appendix – IX.

Selection of in-service candidates will be carried out through an Entrance Exam conducted by the college. The Entrance Exam will comprise of written tests in the following subject area:

- a) Fundamentals of Electrical Power Systems
- b) Fundamentals of Electric Circuits and
- c) Mathematics.

In addition, the candidates should fulfill the following requirements:

- a) Should have completed Diploma in Electrical Engineering from Royal Bhutan Polytechnic/Royal Bhutan Institute of Technology/College of Science and Technology/Jigme Namgyel Polytechnic,
- b) Produce a letter of no objection for enrolling onto the programme from the current employer (if employed).

### **2.3 Entrance Requirements for Diploma in Engineering**

The candidates seeking admission in any Engineering programmes have to fulfill the minimum entrance requirement set by Royal University of Bhutan in the Wheel of Academic Law. Minimum entrance requirement is with Mathematics. Eligible candidates have to follow the selection procedures and admission criteria developed and announced by RUB during the admission time. The following ability rating:

- Mathematics – 5

- Physics – 5
- English – 5
- Two other subjects -1 each

## **2.4 Entrance Requirements for Diploma in Computer System and Network**

The candidates seeking admission to the Diploma in Computer System and Network has to fulfil the minimum entrance requirement set by the Royal University of Bhutan in the Wheel of Academic Law. Minimum entrance requirement is Class XII pass science or equivalent examinations with mathematics. The application should be submitted online and the selection will be merit based. The following ability rating will be applied for the selection through online system set forth by RUB:

- Mathematics – 5
- Physics – 5
- English – 5
- Two other subjects – 1 each

## **2.5 Entrance Requirements for Diploma in Surveying**

Minimum entrance requirement for the candidates seeking admission into the Diploma Programme in Surveying is Class XII pass Science with pass in Physics, Chemistry, Mathematics and Dzongkha. Any student who has not taken Dzongkha in class X has to sit for the competency test. The candidates will also have to fulfil the minimum entrance requirement set by the university. The following ability rating will be applied:

- Mathematics - 5
- Physics – 5
- English – 5
- Any other two subjects – 1 each

## 2.6 Entrance Requirements for Diploma in Materials & Procurement Management

Minimum entrance requirement is class XII pass or equivalent with pass in Mathematics / Business Mathematics and Dzongkha. The following ability rating will be applied:

- English – 5
- Mathematics / Business Mathematics - 5
- Three other subjects – 1 each

## 2.7 In-service Student Admission into Diploma Programmes

### 2.7.1 Selection Procedures and Admission Criteria

#### Entrance Requirements

1. Candidates should have completed class X plus 2 years Certificate Level Course (in Civil / Electrical /Electronics / Mechanical / Automobile) with a minimum of 60 % marks. Otherwise a candidate should have completed Certificate Level Course from the erstwhile Royal Technical College (RTI), Phuentsholing with a minimum of 60% marks.
2. Candidates should have completed a minimum of 36 months of active service.
3. Candidates who have completed certificate level course from outside Bhutan should have their certificate recognized by MoLHR/ RCSC
4. Candidates from **Government/ Corporation / Private Sector** should send their application to JNEC along with a letter of recommendation from the employer. Such candidates should produce No Objection Certificate (NOC) from the employers only after being selected for the programme. Private candidates may apply without letter of recommendation from the employer.

### 2.7.2 Entrance Examination and Admission Schedule

- Announcement in the media –**within 10<sup>th</sup> February**.
- Registration & issuance of examination admit cards for eligible Candidates –**28<sup>th</sup> February**.



- Entrance Examination – **1<sup>st</sup> March**.
- Applicants have to report to the College, register for the entrance examination and collect the Admit Card.
- Entrance examination will be conducted a day after the registration and issuance of admit cards).
- Payment of Entrance Examination fee of Nu.1000/-per candidate –**28<sup>th</sup> February** (at the time of registration for entrance exam).
- Declaration of Entrance Examination result–**15<sup>th</sup> March**
- Issuance of Provisional Admission offer Letter by the College – **16<sup>th</sup> March**

### **2.7.3 Post Entrance Examination Requirements**

The selected candidates shall be required to **pay the fees for one semester** and submit the following documents within **7<sup>th</sup> to 12<sup>th</sup> May**

- a) Letter of Acceptance issued by the College.
- b) No Object Certificate from the employer
- c) Academic Transcripts (Class X, XII, VTI / RTI mark sheets and certificates)
- d) Copy of Citizenship ID Card.

If any candidate(s) fail(s) to fulfill the above requirements, the provisional admission offered to the candidate by the College shall be forfeited and the same will be made available to the next candidate in the merit list, who in turn has to complete all formalities in a month's time from the date of issuance of offer letter.

### **2.7.4 Fees**

- The fee structure is as mentioned in the **Fee Structure**
- The tuition fee stated above is subject to change as per RUB policy.
- If any candidate withdraws after registration, the fees paid shall be forfeited except caution money.
- Other fees, if any, will be charged as applicable to regular self financing candidates.

### **2.7.5 Accommodation**

Candidates are required to arrange their own accommodation. However, if there are vacant accommodations available in the campus, the college will extend hostel facilities for a period of one semester at a time, with rental charges as admissible to other candidates.

Similarly, candidates have to arrange their own food. If they are admitted for the common mess, they have to pay the mess charges as admissible to other candidates.

### **2.7.6 Entrance Examination**

- Entrance examination shall be conducted for all eligible candidates
- applying for admission to Diploma Programme at Jigme Namgyel
- Polytechnic, Dewathang.6.2 Admission will be based on the merit ranking prepared on the basis of Entrance Examination result.
- The Entrance Examination shall be conducted in the following subjects and shall carry the weight-age as stated against each subject:
  - i. Mathematics – 30%. (Class XII Mathematics syllabus).
  - ii. Science – 30%. (Class XII Physics and Chemistry syllabus).
  - iii. Fundamentals of Engineering (Civil, Electrical and Mechanical) – 40%. (Separate papers based on each programme).
- Duration of Examination – 3 hours.
- Maximum number of seats per programme – 5 only.

#### **Note:**

1. The In-Service candidates shall follow the same curriculum prescribed for pre-service candidates.
2. The In-Service candidates shall abide by the same rules and regulation as applicable to pre-service candidates.

## 2.8 Reporting of New Students

Student will have to report to the college on the dates specified. While reporting to the College, the students will have to bring the following items.

1. Class X Mark sheet and Pass certificate (Original and copy).
2. Class XII Mark sheet and Pass Certificate (Original and copy).
3. Certificate of leadership if any (Original and copy).
4. Transfer and character certificate from the school last attended (Original and copy).
5. Citizenship Identity Card or Letter received from Immigration and Census or Department of Civil Registration.

***Note: Students who are not able to provide the citizenship card at the time of reporting should arrange their own accommodations.***

6. Recent passport photo size Photo graph ( 8 Nos).
7. One set of approved Zang Gho and Kira (Can be stitched after reporting to JNEC).
8. Kabney/Rachu.
9. Sickie (1 each).
10. Bedclothes (Mattress, quilt/blanket and bed sheets).
11. Cups, plates and spoons.
12. Umbrella and Mosquito net.
13. One piece of 10 digits Scientific Calculator (Except for Computer Hardware Networking students).
14. One piece of A3 size drawing board (Except for Computer Hardware Networking students).
15. Two sets of navy blue colored Workshop Dress.
16. A sets of drawing instruments comprising of a Mini Drafter/T-Scale, set squares, compass, divider, scale and mechanical pencil(Except for Computer Hardware Networking students).
17. Phob and Toray for official use.
18. Token Fee of Nu. 500.00 per annum.
19. Caution Money of Nu. 1000/-(Refundable when you leave the College).

20. House T-Shirt Nu. 400
21. And all other necessary items like toiletries and stationeries.
22. You must bring Nu. 500.00 as College Development Fee.
23. For Self Financed Students the tuition fee is Nu. 86,360 per year and the tuition fee is payable annually or in two installments. The first installment must be paid at the time of reporting to the College.
24. The accommodation in the college hostels if available will be provided at a nominal rent of Nu. 150 per month and the charges for food will depend on the mess policy of each of the college.

## 2.9 Registration of New Students

For registration into various programmes, the students must obtain the registration forms from the Messenger. The registration formalities are clearly specified in the registration form.

### 2.9.1 Full Scholarship (FS) Students

All FS students are required to report and register individually. They must complete the registration formalities as prescribed by the college. Following are the steps involved in the registration process:

1. Students must obtain the FS registration forms for from the messenger,
2. fill in the prescribed registration forms,
3. pay the fees to the Accounts Section as prescribed in the **Fee Structure**,
4. register in the Exam Cell,
5. get the hostel rooms issued.

### 2.9.2 Self-Funding (SF) Students & In-Service (IS) Students

All Self-Funding & In-Service Students are required to report and register individually. They must complete the registration formalities as prescribed by the college. Following are the steps involved in the registration process:

1. Each student must take the one SF registration form from the messenger for that particular semester.

2. fill in the prescribed registration forms,
3. pay the fees to the Accounts Section as prescribed in the **Fee Structure**,
4. register in the Exam Cell,
5. get the hostel rooms issued.

## **2.10 Registration of Existing (old) Students**

This is with regard to students who are continuing their courses in the higher levels of any programme. Following are the types of students registering for any semester.

### **2.10.1 Full Scholarship (FS) Students**

All regular students are required to report and register individually. They must complete the registration formalities as prescribed by the college. The registration formalities are as per the prescribed registration forms. Following are the steps involved in the registration process:

1. Students must obtain the registration forms for FS registration from the messenger,
2. fill in the prescribed registration forms,
3. pay the fees (if any) in the Accounts Section,
4. register in the Exam Cell,
5. get the hostel rooms issued.

### **2.10.2 Self-Funding (SF) Students & In-Service (IS) Students**

All Self-Funding & In-Service Students are required to report and register individually. They must complete the registration formalities as prescribed by the college. Following are the steps involved in the registration process:

1. Each student must take the one SF registration form from the messenger for that particular semester.
2. If one is repeating any module(s), then one should obtain one MR form from the Exam Cell for repeating the failed module,
3. fill in the prescribed registration forms,
4. pay the required fees in the Accounts Section,
5. register in the Exam Cell,
6. get the hostel rooms issued.

### 3. Fee Structure and Scholarship

#### 3.1 General Fee Structure

The general fee structures for all categories of students are given in the table below.

Sl. No.	Fees	Types of Admission		
		Govt. Scholar	Self-Finance	In-Service
1	Tuition for Engg. Programmes (p.a)	-	Nu.86,360	Nu. 86,360
2	Tuition for Management Programme (p.a)	-	Nu.69,710	Nu. 69.710
3	College Mess (p.m)	-	Nu.1,350	Nu.1,350
4	Hostel Rent (p.m)	Nu.150	Nu.150	Nu.150
5	Caution Money (refundable)	Nu.1,000	Nu.1,000	Nu.1,000
6	CDF (p.a.)	Nu.500	Nu.500	Nu.500
7	Electricity (p.m) (for Self-catering Hostels)	Nu.50	Nu.50	Nu.50

All the students are required to register for all the modules offered in a semester and also for the back paper(s) if any. **It is the responsibility of the students to register for all the modules, whether it is regular or back paper.**

Students repeating any module will have to pay an amount equal to 10% of tuition fee per module.

Self-funding students may pay their tuition fees in two installments.

The first installment must be paid at the time of registration.

The second installments must be paid one week before the commencement of phase tests. If a student fails to pay the fees on time, the names of the defaulters will be submitted to Dean, Academic Affairs. The defaulters will not be allowed to sit for the phase test and classes will be marked absent till the fee is paid.

## **4. Laboratory Facilities**

### **4.1 Civil Engineering Department**

The Civil Engineering Department has the following laboratories and workshops:

- Surveying Laboratory
- Photogrammetric Remote Sensing and GIS Laboratory
- Soil Mechanics & Foundation Engineering Laboratory
- Plumbing Workshop
- Highway Engineering Laboratory
- Engineering Mechanics Laboratory
- Building Construction Laboratory
- Hydraulics Laboratory
- Public Health and Engineering Laboratory
- Computer Laboratory

### **4.2 Electrical Engineering Department**

The Electrical Engineering Department has the following laboratories and workshops:

- Electrical Machine Laboratory
- Electrical Workshop Practice
- Electrical Measurement and Instrumentation Laboratory
- Power Electronics Laboratory
- Electronics Laboratory
- Control System Laboratory
- Communication Laboratory
- Power System Protection and Switchgears Laboratory
- Lighting and Energy Efficiency Studies-Research Center of Excellence
- Computer Laboratory

#### 4.3 Mechanical Engineering Department

The Mechanical Engineering Department has the following labs and workshops:

- Machine Shop
- Fitting Workshop
- Sheet Metal Workshop
- Welding workshop
- Automobile workshop
- Heat Engine Laboratory
- Refrigeration & Air Conditioning Laboratory
- Hydraulics & Pneumatics Laboratory
- Engineering Mechanics Laboratory
- CAD Laboratory

#### 4.4 Information Technology Department

IT Department is housed in a newly constructed IT cum Library building. It has fully furnished classrooms and faculty offices. The department has following Laboratories.

- Computer Laboratories with 45 PCs – 3
- Server Room
- Hardware Laboratory
- Networking Laboratory
- Audio Visual room
- Multi-Media Room

#### 4.5 Humanities and Science Department

Humanities and Science Department has following laboratories.

- Tally Laboratory



## 5. College General Rules and Regulations

### 5.1 Objectives

In order to maintain good environment for the students to study and maintain harmony in the college, the following Disciplinary Rules are framed for strict compliance by the students. The Disciplinary Rules include:

### 5.2 Hostel & Mess Rules

All resident students shall:

1. Ensure good social environment;
2. Follow the principles of good health & hygiene by keeping the rooms, toilets & bathrooms, hostel surroundings neat & clean;
3. Take good care of the hostel facilities provided by the college as a prudent person would do for his/her own properties;
4. Follow the principles of good neighbor;
5. Follow the three principles of Bhutanese *Zah-Cha-Dro soom* (eat-do-walk) rules and the good principles of dining;
6. Follow the principles of equity and maximizing utilization of resources;
7. Maintain proper decorum in the hostel and dining areas;
8. Not entertain any guest without availing prior permission from the college authority;
9. Not smoke, consume any alcoholic beverages and drugs;
10. Not engage in any form of gambling;
11. Not engage in any kind and/or degree of ragging;
12. Not cook and use power consuming electric appliances in the non-self-catering hostel since no provisions are made for such activities other than studying and sleeping. The students are provided with cooks, separate kitchen and fuel from the college.
13. Undertake the charges of the allocated rooms, take good care of and hand over the rooms prior to leaving the college upon successful completion of the course, suspension, long medical leave, failure in a semester exam, termination;
14. Not play football or other games within the courtyards between hostel blocks which would cause damage to window panes and other college properties due to impact from hard objects and other reasons;
15. Not change the allocated room without prior approval from the

Dean, Student Affairs;

16. Ensure that you are all physically present in your respective allocated hostel rooms by 7:00 PM and observe silence hours after 7:30 PM.
17. The residents are not allowed to change/shift any furniture without prior approval from Residence Coordinator.
18. While reporting back to the college after vacation, students must take prior permission from respective Residence Coordinators to occupy their rooms. Students must occupy the allocated rooms without changing.
19. **Students having to sit for Re-assessment Exam will not be allowed to avail hostel facilities before one week before the exam.** Further, the students reporting for the supplementary exam must get prior permission from the Residence Coordinator before occupying the room. If any students enter any room without permission he/she will be expelled from the hostel.
20. Every student must lock his/her room properly and hand over the keys to respective Residence Coordinator before leaving on vacation, graduation or on any other reasons.
21. If there is any maintenance to be done, block councilor shall inform the respective Residence Coordinator.

### 5.3 Dress and Etiquette rules

All students shall:

1. Wear national dress in all the theory classes and normal official activities;
2. Wear approved workshop dress during the laboratory and practical periods only;
3. Wear approved *Drig-gho* with *Kabney & Rachu* during important official ceremonies and on other occasions as per direction;
4. Wear proper leather shoes in all the classes irrespective of theory or practical;
5. Respect and follow the national dress code and the code of conduct & ethics at all places and times;
6. Wear decent clothes (*without offensive messages, Singlets, Torn clothing, Mini-shorts/Mini-skirts, Provocative & revealing attire (e.g. exposed midriffs, bare backs, spaghetti straps, cropped tops), Caps (except for safety reasons),* at places and

times as deemed appropriate.

7. Not wear long hair and ear rings (*for males*) and artificial coloring of hair (*for both genders*).

#### 5.4 Prayer Rules

All resident students shall:

1. Attend all the prayer sessions as per the timetable decided by the college authority;
2. Observe and follow the proper **Dress & Etiquette Rule**;
3. Take good care and use of the religious and other related facilities, if they are provided.
4. Not perform rituals outside the campus.

#### 5.5 Co-Curricular Rules

All students shall:

1. Participate in all the co-curricular activities organized by the college either as participants or observers with an aim of entertaining, information dissemination, and self development;
2. Observe and follow the rules and regulations prescribed for a particular game/contest;
3. Exhibit decency in dress and behavior both as participant and observer;
4. Exhibit the spirit of a good sportsmanship in case of participants;
5. Put up high quality contests/shows/programs and promote/preserve the national culture;
6. Take good care and use of the games & sport facilities, musical instruments and other related facilities, if they are provided.

#### 5.6 Entertainment Rules

All students shall:

1. Use entertainment time as a means for relieving and refreshing their mind and body from mental and physical stresses;
2. Take good care and use of the entertainment facilities, if they are provided;
3. Maintain proper decorum during any show / program;

## 5.7 Leave Rules

All students shall try to avail as less leave as possible. However, in case they are required to avail leave then every Student shall avail prior permission from:

1. The concerned faculty/staff and/or Residence Coordinator in the case of taking short leaves for going to hospital, bank and post office;
2. The Residence Coordinator, concerned Head of Department and the Dean Students Affairs through a leave form in the case of taking longer **leaves of more than 8 hours**;
3. The Residence Coordinator, concerned Head of Department and the Dean Students Affairs through a written application in the case of long medical leaves where it may be required to stay out of the campus;
4. Report to the college on the approved time and/or date of return;
5. Produce documentary evidence of doctor's advice to undergo medical treatment while seeking for medical leave;
6. In case of late arrivals (without justifiable reasons) after the leave and/or vacation, students shall be levied a fine of Nu.50.00 only per day for 7 days. Thereafter the defaulter shall pay Nu.100.00 only per day for the rest of the days, after which the Student shall be declared to have failed in meeting the 90% attendance criteria of the college and considered ineligible to continue the semester.
7. **Late reporting after the official reporting/registration date** shall be allowed **but with late fine (as mentioned in the above clauses) only up to a maximum of ten (10) days** after the official reporting/registration date. **Any student reporting later than ten (10) days after the official College Reporting/Registration date SHALL NOT be allowed to continue his/her studies in the particular semester in which he/she reports late by more than ten (10) days.** However, he/she may be allowed to repeat the semester in the next year at his/ her own cost.
8. In case of a medical case, a student may be allowed to report later than ten days with original medical documents.

## 5.8 Morning Assembly Attendance

Morning assembly attendance is considered very important activity by the college and all the students are required to attend all morning assemblies. The following regulation was adopted in the 68<sup>th</sup> CMC meeting:

1. Morning Assembly Attendance will be taken by the Residence Coordinator, right after every Assembly.
2. Every student must ensure a minimum of 80% attendance in the morning assembly over a period of one semester, every semester.
3. If a student fails to have a minimum of 80% attendance in the morning assemblies without justifiable reasons in a semester, his/her character will be accordingly implicated.
4. As a reminder or information to students, Chief Residence Coordinator will notify the status of Morning Assembly attendance in the middle of semester, every semester.

## 5.9 General Rules

All concerned students shall:

1. Get Identity-Cum-Permission Card each issued from the Chief Residence Coordinator after paying a nominal price of Nu.50. This card shall be used for availing any kind of leaves and for identifying themselves as true students of the college when they move out of the college campus. This card shall be valid for a period of one year from the date of issue. Each Student shall thereafter renew the card. In case of loss of card, the Student shall immediately purchase it @ Nu.50.00 only from the college stores. The new card (s) will have to be validated by the President signature.
2. Students who are studying a semester at their own cost shall pay the 2<sup>nd</sup> installment of their fees one week before the commencement of Phase Test. If any student fails to pay the fee on time, his/her names will be submitted to Dean, Academic Affairs. The defaulter(s) will not be allowed to sit for phase test and the classes will be marked absent till they pay the fees.
3. Upon completion of the course and/or when required by

circumstances otherwise every Student shall return the card to the Chief Residence Coordinator;

4. Attend and be punctual in all the regular activities (Morning Assemblies, Classes, Saturday Work Programs, Games & Sports Activities, Cultural Activities, and Others as notified);
5. Wear appropriate clothes and shoes and protective attire that may be prescribed by the College Management.
6. Always comply with industrial safety rules as directed by the supervising staff.
7. Immediately report any injury or accident that occurred in the workshop or laboratory to the supervising staff.
8. Demonstrate highest standard of ethics and code of conduct as per the prevailing College Rules, culture, tradition and laws of the country at all places (within and outside campus) and time (session and vacation) as a Student of this college.
9. Dedicate full time and effort towards building Knowledge, Skills and Attitudes (KSA).
10. Restricted from carrying out any activity on any college property that will lead to its damage or change in its shape, size, color and other physical/chemical characteristics.
11. Encourage and create harmony & integrity in the college community and refrain from any misbehavior, whatsoever may be the nature and degree.
12. In the interest of maintaining proper sanctity, privacy and decorum be prohibited from visiting opposite gender's hostels.
13. Hand over all college property in proper conditions, including the rooms, issued against their names upon their successful completion of the course and/or otherwise as directed/required by the college authority.
14. Be held accountable for breach of college rules and consequences thereof.
15. Report any loss or damage of property to any staff or office immediately.
16. Not write on table tops and other furniture in the lecture theatres, laboratories, studios, classrooms and other areas of the college.
17. Exhibit simple courtesy and respect for the lecturer in a class by not listening to music from the walkman or radio, even if it is through the use of headphones.

## 5.10 Character Certificates

1. Every student's character shall be assessed and issued upon graduation/leaving the College.
2. The character of any student shall be assessed under any of the following three categories:
  - i. Very Good
  - ii. Good
  - iii. Satisfactory
3. The assessment and rating of student character shall be done by the following officials:
  - i. Dean Student Affairs
  - ii. Respective Head of Department
  - iii. All Residence Coordinators
  - iv. Respective House Advisors
4. Each official shall rate a student as very good/good/satisfactory and the final rating from all the officials shall be arrived at by taking the average. If there is a tie between any two categories, then the higher category shall be taken as final rating.
5. If any student is issued with last warning or is suspended from the College, he/she will be directly included under satisfactory character.
6. Each student shall be issued with a separate character certificate.

## 5.10 Disciplinary Committee – its roles, responsibilities and authority

1. The College shall have a Disciplinary Committee consisting of President as Chairperson, Deans, concerned Head of Department, Student Service Officer, Chief Councilor and student councilor of concerned hostel.
2. The committee shall make its decisions based purely on the general interest and integrity of the college.
3. The committee shall ensure proper justice on all offences as may be committed by the students across all students.
4. The committee, in the interest and integrity of the college, shall take appropriate action against the defaulting Student based on the nature and/or degree of breach committed.

5. In case of emergency and if required by circumstances, any other faculty/staff may also be included as member.
6. The committee, in the general interest of the college, may
7. Change, in part or whole, the above rules to suit the prevailing needs of the college;
8. Take actions on matters not included in this rule but affects the general interest of the college;
9. The committee shall inform the concerned parents/guardians over the phone/fax (if possible) as soon as possible in case of suspension and termination and send a copy of the decision. For the rest of the cases, only the copy of the decision may be sent.
10. Defaulting students shall put petitions to Grievance Committee immediately after Disciplinary committee decisions are passed for further clarification.

### **5.11 Mode of Actions on Disciplinary Problems**

Actions shall be taken against those who fail to comply with any of the rules mentioned in the above based on the following:

- (i) The seriousness of the misconduct,
- (ii) The circumstances surrounding it,
- (iii) The adverse implication that it may bring if actions were not taken,
- (iv) The past records, if any.

The actions taken against the defaulter may range from advices and counseling, to written warning, suspension and even termination as mentioned in 6.10.1.



## **6. Academic Rules and Regulations**

### **6.1 Assessment Regulations**

The College adopts both Continuous Assessment (CA) and Semester End Examination (SEE) to assess the performance of students.

#### **6.1.1 Continuous Assessment (CA)**

CA is assessed on the basis of phase tests, class tests, quizzes, assignments, case studies, mini projects, as appropriate for the module. The phase test is conducted during the eighth (8<sup>th</sup>) week after the commencement of the semester. Class tests, quizzes, assignments, case studies are distributed evenly throughout the semester and assessed accordingly.

The CA of the students in the Laboratory/Workshop is assessed on the basis of their performance in the laboratory / workshop, written reports submitted against each experiment / laboratory works/ job performed and practical tests / viva-voce or both as appropriate.

#### **6.1.2 Distribution of CA marks**

The distribution of CA marks for different component of assessment is as per the modules descriptor.

#### **6.1.3 Make-up Test**

A Make-up test is a test conducted for those students who are not able to attend the phase test. Students may be allowed to sit for the make-up test under any of the following circumstances:

- (a) If a student is hospitalized and/or advised bed rest by a authorized medical officer, during the time of the test,
- (b) In the event when a student is away from the college during the time of the test to attend the funeral of his / her parents, brother or sister.

- (c) If a student is on official duty during the time of the test and when the absence is inevitable.

However, in all such cases, the concerned student has to produce authentic documents to the Dean Academic Affairs (DAA) through the Head of the respective department. A student may be allowed to sit for the make-up test subject to approval from the DAA.

Student(s) should have informed the Dean Student Affairs (DSA) and sought approval for leave prior to leaving the College to attend any out of station works.

Based on the evidence presented by the student, the DAA shall grant permission for the make-up test if the reason of absence is felt genuine. Otherwise that component of the test will be marked 0 (Zero).

Following points are to be noted:

- i. Students appearing for the make-up test on the above ground shall be awarded the actual marks that s/he has secured.
- ii. Syllabus for the make-up test shall be the whole syllabus covered till the date scheduled for the make-up test.
- iii. Respective module tutors, in consultations with the Head of the Department (HoD) and the Controller of Examination (CoE) shall organize and conduct the make-up test and submit the marks to the Examination Cell.

**Note:** The CA marks shall be made available to students **seven days** before the scheduled date of start of the SEE.

#### 6.1.4 Semester End Examination (SEE)

The SEEs are conducted internally. The respective module tutors are mandated to prepare the SEE question papers which will be moderated by a moderation panel. The HoDs shall constitute and appoint the moderation and re-evaluation panel.

#### 6.1.5 Eligibility to Appear in the SEEs

To be eligible to sit for the SEEs a student must have:

A minimum of 90% attendance in each module during the semester. (80% attendance in case of students who are allowed medical/ official/extra ordinary leave).

If any student's attendance falls below 90% in any module(s), he/she will not be eligible to appear in the SEEs of that module(s). The concerned student will be treated failed in the module(s) where the attendance is less than 90% or 80% (in case of students who are allowed medical/ official/extra ordinary leave) and have to repeat the module(s) with compulsory attendance [Second ACDA meeting, January 2015]

**Note:**

The respective module tutor shall submit the names of all those student(s) who are not able to secure 40% marks in CA or do not have class attendance more than 90% in any module(s) to the DAA through the respective Head of department **5 (five) days** before the scheduled time of start of the SEEs.

### **6.1.6 Promotion / Progression Criteria**

The Programme Board of Examiners of respective department makes decisions on the assessment and promotion of each student and report to the College Academic Committee for final ratification and declaration of the result. A student failing in not more than two (2) modules shall qualify for promotion to next higher semester. However, the student has to repeat the failed module(s) whenever the module(s) are offered next.

### **6.1.7 Assessment of a Module and Progression [WAL D1.6]**

- (a) To pass a module a student must obtain a minimum of 50% overall marks including both the CA and SEEs. However, students must obtain a minimum of 40% marks each in CA and SEEs in each module.
- (b) A student will be awarded a mark of zero for non-submission of a component of course work.

- (a) A student who has been absent from the examination or who has performed badly due to illness or other cause acceptable to the Programme Board of Examiners shall be allowed to take the examination and it shall be treated as a first assessment. The examination will be conducted during re-assessment time.

### 6.1.8 Re-assessment and Repeat of a module [WAL D1.6]

- (a) Reassessment is permitted to allow a student to make good an initial failure.
- (b) A student may be re-assessed in a failed module(s) provided that he or she:
- has not failed in more than 30% of the total number of modules prescribed for that semester (rounded off to the nearest whole number).
  - shall not be re-assessed in a module more than once.
- (c) Re-assessments should take place before, or at the commencement of the next semester.
- (d) A student who is re-assessed for a module failure, where there are no clear extenuating circumstances<sup>1</sup>, shall be awarded no more than 50% marks on passing the re-assessment, this being the minimum pass marks.
- (e) A student shall be eligible to repeat failed module(s) where he or she:
- has failed in the re-assessment of module(s). In such an event, the student shall meet all assessment requirements of those modules. For students under this category, attendance in lectures is not mandatory.

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<sup>1</sup> *Extenuating circumstances is defined in section B10 of WAL 2011.*

- has failed more than 30% of the total number of modules prescribed for that semester (rounded off to the nearest whole number of modules). In such an event the student shall meet all teaching, learning and assessment requirements of the failed modules. For students under this category, attendance in lectures is mandatory.
- (f) A student will be given the opportunity to repeat a failed module when it is offered at the first available instance.
  - (g) Where a module is repeated the mark obtained will replace the mark achieved at earlier attempts.
  - (h) A student may repeat a failed module only two times. In the event a student fails a repeated module, he/she will not be eligible for re-assessment.
  - (i) Any student who have to repeat a module(s) have to pay the tuition fees for each module being repeated.
  - (j) The normal / prescribed duration of course at JNEC for B.E is 4 years and 2 years for Diploma programme.
  - (k) Any student(s) who fail to complete the course within the normal / prescribed duration have to repeat the course as a self financed student. Such candidate(s) has to bear the tuition fee and stipend.
  - (l) The maximum permissible duration for the completion of 2-year diploma programme at JNEC is 4 years and 6 years for B.E. which includes an additional grace period of two (2) years.
  - (m) Any student(s) not able to complete the course within the maximum permissible duration has to withdraw from the programme and will not be eligible for the award of diploma.
  - (n) Students who fail in On-the-Job Training or Project Work shall repeat the same at their own expense. They have to make arrangements for accommodation and food.

- (o) Any student failing to register to repeat the failed module will be treated failed in that module and losses one opportunity to repeat the module [13th IAC].

### 6.1.9 Re-Check of Module

- a) Students can request for recheck of their semester end examination answer scripts. The recheck will ensure that all sections of a student's responses are marked and that all marks are accounted for in the total. An administrative fee of Nu 200 per module will be levied. The fee will be reimbursed in the event of an error resulting in change in the marks of a student. (WAL, 2011)
- b) As per the decision of College Academic Committee, students applying for recheck must appeal within 15 days after the declaration of end examination result. Further delay appeal will not be entertained under any circumstances

### 6.1.10 Academic Dishonesty [D4, WAL 2011]

The maintenance of fair and honest conduct is an essential part of any assessment system. The University views any form of academic dishonesty as a serious offence and will deal with it accordingly.

Academic dishonesty may be defined as any attempt by a student to gain an unfair advantage in any assessment. It may be demonstrated by one of the following:

- (a) **Collusion:** the representation of a piece of unauthorized group work as the work of a single candidate.
- (b) **Commissioning:** submitting an assignment done by another person as the student's own work.
- (c) **Duplication:** the inclusion in coursework of material identical or substantially similar to material which has already been submitted for any other assessment within the University.

- (d) **False declaration:** making a false declaration in order to receive special consideration by an Examination Board or to obtain extensions to deadlines or exemption from work.
- (e) **Falsification of data:** presentation of data in laboratory reports, projects, etc., based on work purported to have been carried out by the student, which have been invented, altered or copied by the student.
- (f) **Plagiarism:** the unacknowledged use of another's work as if it were one's own.

Examples are:

1. verbatim copying of another's work without acknowledgement
2. paraphrasing of another's work by simply changing a few words or altering the order of presentation, without acknowledgement
3. ideas or intellectual data in any form presented as one's own without acknowledging the source(s)
4. making significant use of unattributed digital images such as graphs, tables, photographs, etc. taken from test books, articles, films, plays, handouts, internet, or any other source, whether published or unpublished
5. submission of a piece of work which has previously been assessed for a different award or module or at a different institution as if it were new work
6. use of any material without prior permission of copyright from appropriate authority or owner of the materials used

#### 6.1.11 Penalties for Academic Dishonesty

1. Any student(s) found using unfair means or in possession of materials that could be used for unfair means in any of the tests (class tests, phase test, assignment) will be marked Zero in that test and shall not be eligible to sit for the makeup test. [15<sup>th</sup> PBE held on 24<sup>th</sup> April 2012]

2. Any student found using unfair means or in possession of materials that could be used for unfair means in any paper during the SEEs will be treated failed in that semester. All his examination of that semester (regular and repeat modules) will be treated null and void. He/she will be eligible to repeat the semester when offered next as a self financed student. [Second ACDA, Jan 2015].

Additional regulations will remain valid as per WAL 2011.

**Note:**

The re-assessment (supplementary examination) is normally conducted one week prior to the commencement of the new semester.

## **6.2 Final Results and Award for B.E. in Power/Mechanical/Surveying & Geoinformatics Engineering**

For the award of B.E. in Power Engineering and calculation of final result, the academic weight-age fixed for four year programme is as under based on WAL;

10% from first year	(5% per semester) *
20% from second year	(10% per semester)
30% from third year	(15% per semester)
40% from fourth year	(20% per semester)

*\*For in-service candidate, 10% from two modules viz. Fluid Mechanics (FLM102) and Applied Mathematics (AMA103) as decided in 31<sup>st</sup> AB meeting. These two modules will be offered as bridge course and the result will be considered for the calculation of final result.*

## **6.3 Final Results and Award for Diploma**

A student is eligible for the award of Diploma on successful completion of the prescribed course. S/he must be a registered student of the College.



For the award of Diploma and calculation of final result, the academic weight-age fixed for two year programme is as under based on WAL

First Year 30%	:	(15% from each semester)
Second Year 70%	:	(35% from each semester)

#### 6.4 Performance Judgement for B.E. and Diploma

Judgement of performance for both B.E. and Diploma will be made in the following scales:

- (i) 80% and above - An outstanding performance.
- (ii) 70 - 79.9% - Very good performance.
- (iii) 60 - 69.9% - Good performance.
- (iv) 50 – 59.9% - Satisfactory performance.
- (v) 49.9 % and below - Fail

#### 6.5 Eligibility for the Award of Positions

- a) Only students who have passed all the modules in the first attempt are eligible for first and second position.
- b) Any student who had taken re-assessment or had to repeat module(s) or semester will be eligible to compete from **third position** onwards.

#### 6.6 Dos and Don'ts during the Examination

1. All Candidates should be present at the vicinity of the examination hall thirty minutes before the scheduled time of the commencement of examination.
2. Candidates should enter the examination hall only after the invigilators have entered.
3. Candidates should occupy their own allocated seats. Any change of the seats without the permission from the Chief Invigilator will result in the expulsion of the candidate from the examination.
4. Candidates must reach the examination hall in the prescribed time. Anyone coming **later than 20 minutes** without any valid reasons will not be permitted to appear in

the **Particular Examination**. Should there be any genuine reasons; such candidate will require bringing the approval from the Dean AA / President. However, loss of time in the process of obtaining the written approval will not be entertained.

5. Candidates are not allowed to take any paper(s) other than the **Student's Identity cum Permission Card** into the examination hall except in the **Open book examination**. Candidate(s) found carrying any restricted materials shall be detained for further query.
6. All candidates should ensure that they bring their own pen, pencil, scale, ink, eraser, calculator, instrument box, etc. that would be required for the specific examination. **Borrowing of any such materials** from their **colleagues** will not be permitted during the examination time. Any attempt to borrow such materials from the colleagues may result in expulsion of the candidate(s) from the examination hall. They will not be allowed to even request the invigilators to borrow such materials from another examinee.
7. Candidates should ensure that the approved support materials such as calculator, log tables, data sheets, instruments box should be free from any additional information or writings.
8. Candidates should use only **blue / black ink pen/ ball pen** for writing answers and filling up the information on the cover page of the answer book. Writing answers by pencil is not permitted in the examination / tests except for drawing figures or graphs. [9th IPBE].
9. **Programmable or text storing calculators** are not permitted in the examination hall.
10. Candidates are not permitted to bring mobile phones or any other electronics equipment, other than a standard scientific calculator, into the examination hall. If such

restricted items are found by the invigilators during the checking, the same will be seized and handed over to the Examination Cell for further investigation and action.

11. Candidates should complete the entries of their Examination particulars such as **Roll (registration) number, discipline of study, module name and date of examination on the cover page** of the answer book before they start writing the examination. No one is allowed to write his or her name anywhere on the answer book. Answer books without candidates roll number and invigilators signature will be disqualified and will not be evaluated.
12. Candidates are required to check their answer books before they start writing on it. If any page or pages are found to be torn or not in writing condition, the matter must be reported to the invigilators for replacement
13. Every candidate is required to write his / her roll number (registration number) on their question papers also.
14. All Supplementary answer sheets, if any used, must contain the individual's student number/ Examination Number, dated signature of the invigilators and must be serially arranged and tied or stapled.
15. Candidates will be discouraged to go for needs of any kind during the examination. In case of urgency, they may be allowed to go one at a time. However they may be checked for the possession of any restricted materials any time.
16. Candidates should be allowed to leave the examination hall only after two third of the examination time has been completed. They are required to submit their answer script to any of the invigilators before leaving the examination hall. If any candidate(s) leaves the examination hall without submitting the answer scripts, s/he will be awarded ZERO marks and declared failed in that module.

17. Candidates are advised not to adopt any unfair means during examination. If any candidate is found using any sort of unfair means or found in possession of any materials that could be used as unfair means in the examination, the invigilator shall cease the answer book along with the materials used for unfair means and report the case immediately to the CoE with a written report for final verification by the disciplinary committee and action by the PBE. The candidate may be given a fresh answer sheet to continue writing his / her examination.
18. Any candidates failing to report to the examination without prior information and approval will be awarded ZERO marks and the candidate will be treated failed in that module. However, he/she will be eligible to appear in the re-assessment (supplementary examination). Only the minimum marks required to pass the module will be considered and not the actual marks obtained in the re-assessment.
19. Similarly if any candidate fails to report for the supplementary examination / re-assessment, such candidates will be declared failed in that module. Such candidate(s) may be permitted to repeat the module provided the maximum permissible duration of the course is not exhausted.

## 7. Module Matrices for the Programmes offered at JNEC

### 7.1 Module Matrix for B.E. in Power Engineering

#### Year 1 - Semester I

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
ADE101	Analog and Digital Electronics	12	3	1	2	25	25	50	100
AMA102	Applied Mathematics I	12	3	1	0	25	0	75	100
EGP101	Engineering Graphics*	12	1	0	5	50	0	50	100
ACS101	Academic Skills*	12	2	1	2	100	0	0	100
EDW101	Electrical Drawing and Workshop Practice	12	1	2	2	50	50	0	100
<b>Total</b>		<b>60</b>	<b>10</b>	<b>5</b>	<b>11</b>	<b>250</b>	<b>75</b>	<b>175</b>	<b>500</b>

#### Year 1 – Semester II

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
BEE103	Circuit Theory and Networks	12	3	1	2	25	25	50	100
AMA103	Applied Mathematics II	12	3	1	0	25	0	75	100
FLM102	Fluid Mechanics	12	3	1	2	25	25	50	100
DZG101	Dzongkha for Communication *	12	2	0	2	25	25	50	100
EMI102	Measurements and Instrumentation	12	3	1	2	25	25	50	100
<b>Total</b>		<b>60</b>	<b>14</b>	<b>4</b>	<b>8</b>	<b>125</b>	<b>100</b>	<b>275</b>	<b>500</b>

## Year 2 – Semester I

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
EMC203	DC Machines and Transformers	12	3	1	2	25	25	50	100
AMA204	Applied Mathematics III	12	3	1	0	25	0	75	100
PEG201	Electrical Power Generation	12	3	1	0	25	0	75	100
PEG202	Hydro Power Engineering	12	3	1	2	25	25	50	100
EMT201	Electro Magnetic Field Theory	12	3	1	0	25	0	75	100
<b>Total</b>		<b>60</b>	<b>15</b>	<b>5</b>	<b>4</b>	<b>125</b>	<b>50</b>	<b>325</b>	<b>500</b>

## Year 2 – Semester II

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
EMC204	AC Machines	12	3	1	2	25	25	50	100
PEG203	Electrical Power Transmission and Distribution	12	3	1	0	25	0	75	100
PEL202	Power Electronics	12	3	1	2	25	25	50	100
EMA202	Energy Management and Auditing	12	3	1	0	25	0	75	100
COP204	Data Structure and Object Oriented Programming in C++	12	1	0	3	25	25	50	100
<b>Total</b>		<b>60</b>	<b>13</b>	<b>4</b>	<b>7</b>	<b>125</b>	<b>75</b>	<b>300</b>	<b>500</b>

### Year 3- Semester I

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
PEG304	Utilization of Electrical Energy	12	3	1	0	25	0	75	100
CSY303	Automatic Control System	12	3	1	2	25	25	50	100
PEG305	Power System Protection and Switchgear	12	3	1	2	25	25	50	100
PEG306	Power System Analysis and Stability	12	3	1	2	25	25	50	100
PRW302	Basic Research Methods and Seminar	12	1	2	0	100	0	0	100
<b>Total</b>		<b>60</b>	<b>13</b>	<b>6</b>	<b>6</b>	<b>200</b>	<b>75</b>	<b>225</b>	<b>500</b>

### Year 3- Semester II

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
PEG307	Power System Operation and Control	12	3	1	2	25	25	50	100
RER301	Renewable Energy Resources	12	3	1	0	25	0	75	100
PEL303	Power Electronics Application	12	3	1	2	25	25	50	100
COP305	Microcontroller and Embedded System	12	3	1	2	25	25	50	100
MGT302	Engineering Economics and Management	12	3	0	0	25	0	75	100
<b>Total</b>		<b>60</b>	<b>15</b>	<b>4</b>	<b>6</b>	<b>125</b>	<b>75</b>	<b>300</b>	<b>500</b>

## Year 4- Semester I

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
PEG408	Power System Optimization	12	3	1	2	25	25	50	100
PEM401	Power System Economics and Hazard Management	12	3	1	0	25	0	75	100
PEG409	High Voltage Engineering and Insulation Coordination	12	3	1	2	25	25	50	100
	<b>Elective 1</b>	12	3	1	0	25	0	75	100
PRW404	Project Work	VII & VIII Sem.			4	25 Marks for ongoing review			
<b>Total</b>		<b>48</b>	<b>12</b>	<b>4</b>	<b>8</b>	<b>125</b>	<b>50</b>	<b>250</b>	<b>425</b>

## Year 4- Semester II

Module Code	Name of Module	Credit	Time Allocation			Assessment			
			L	T	P	CA (Th.)	CA (P)	Sem. Exam	Total Marks
SEN401	Sustainable Engineering	12	3	1	0	25	0	75	100
	<b>Elective 2</b>	12	3	1	0	25	0	75	100
OJT402	Internship and Seminar	12	Min. 45 days (internal 60 and external examiner 40 marks respectively)						100
PRW404	Project Work	36	0	0	6	Ongoing, review, reports and presentation			75
<b>Total</b>		<b>72</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>150</b>	<b>75</b>	<b>150</b>	<b>375</b>

**Note:** L: Lecture T: Tutorial P: Practical CA: Continuous Assessment



## **List of Electives:**

### **Elective 1**

- i. AKS101 Analytical Skills<sup>\*</sup>
- ii. UHV101 Universal Human Values and Professional Ethics
- iii. EDP201 Entrepreneurship Development<sup>\*</sup>
- iv. SUR202 Principles of Surveying<sup>\*</sup>

### **Elective 2**

- i. EMC405 Electrical Machine Design
- ii. SGT401 Smart Grid Technologies
- iii. PEG410 Power Qualities and Harmonics
- iv. SYS401 Digital Signal Processing and its Applications
- v. PEG411 Advance Power System Protection and Switchgear

<sup>\*</sup> Denotes a pre-existing module in another department (Civil, Mechanical, Electrical and IT) at JNEC which will be adopted for the B.E. in Power Engineering.

## 7.2 Module Matrix for B.E. in Mechanical Engineering

### Year 1– Semester I

Sl. No	Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	EGP101	Engineering Graphics	1	0	5	12	50	50	0	100
2	DZG101	Dzongkha Communication	2	0	2	12	50	50	0	100
3	ACS101	Academic Skills	2	0	2	12	100	0	0	100
4	FME104	Material science	3	0	2	12	25	50	25	100
5	FEE102	Fundamentals of Electrical Engineering	3	1	2	12	25	50	25	100
Total			11	1	13	60	250	200	50	500

### Year 1– Semester II

Sl. No	Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	FME105	Mechanics of Materials-I	3	1	2	12	25	50	25	100
2	AMA102	Applied Mathematics-I	3	1	0	12	25	75	0	100
3	MDD103	Mechanical Drawing	1	0	4	12	50	50	0	100
4	ADE101	Analog and Digital Electronics	3	1	2	12	25	50	25	100
5	COP204	Data structure & Object-Oriented Programming in C++	1	1	3	12	25	50	25	100
Total			11	4	11	60	150	275	75	500

## Year 2- Semester I

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	FME206	Mechanics of Materials-II	3	1	2	12	25	50	25	100
2	AMA103	Applied Mathematics-II	3	1	0	12	25	75	0	100
3	FEE203	Fundamentals of Electrical Machines	3	1	2	12	25	50	25	100
4	FME207	Metrology	3	0	2	12	25	50	25	100
5	PAE206	Engineering Thermodynamics	3	1	0	12	25	75	0	100
Total			15	4	6	60	125	300	75	500

## Year 2- Semester II

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	FME208	Fluid Mechanics	3	1	2	12	25	50	25	100
2	AMA205	Transform Techniques	3	1	0	12	25	75	0	100
3	MPT205	Manufacturing Processes – I	3	0	2	12	25	50	25	100
4	FME209	Kinematics & Dynamics of Machines	4	1	2	12	25	50	25	100
5	MDD204	Computer Aided Design/ Computer Aided Manufacturing	3	0	2	12	25	50	25	100
Total			16	3	8	60	125	275	100	500

### Year 3- Semester I

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	PAE307	Hydraulic Machines	3	1	2	12	25	50	25	100
2	AMA306	Numerical Methods and Optimization	3	1	2	12	25	50	25	100
3	MPT306	Manufacturing Processes – II	3	0	2	12	25	50	25	100
4	MDD305	Design of Machine Elements	3	1	0	12	25	75	0	100
5	PAE308	Heat & Mass Transfer	3	1	2	12	25	50	25	100
Total			15	4	8	60	125	275	100	500

### Year 3- Semester II

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	CSY303	Automatic Control System	3	1	2	12	25	50	25	100
2	PAE309	Heating, Ventilation & Air Conditioning	3	1	0	12	25	75	0	100
3	MPT307	Advanced Manufacturing Technology	3	0	2	12	25	50	25	100
4	MDD306	Mechanical Vibrations	3	1	2	12	25	50	25	100
5	PRW303	Research Methodology	3	0	2	12	30	0	70	100
Total			15	3	8	60	140	225	135	500

## Year 4- Semester I

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	IAM405	Mechatronics	3	0	2	12	25	50	25	100
2	IAM406	Fluid Power and Automation	3	0	2	12	25	50	25	100
3	PAE410	Automotive Engineering	3	0	2	12	25	50	25	100
4	EEA401	Engineering Economy	3	0	2	12	25	50	25	100
5	PRW405	Project	7th & 8th sem.		1	-	Proposal presentation & 1st review		20	20
Total			12	0	9	48	100	200	120	420

## Year 4- Semester II

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	IAM407	Industrial Engineering	3	0	0	12	25	75	0	100
2	MPT408	Maintenance Engineering	3	1	0	12	25	75	0	100
3		Electives*	-	-	-	12	-	-	-	-
4	OJT402	Internship & Seminar	0	0	1	12	0	60	40	100
5	PRW405	Project	7th & 8th sem.		1	24	Ongoing Review, Report, & Guide assessment		80	80
Total			6	1	1	72	50	210	120	380

### List of Electives

The following modules are identified to be offered as electives in the Year IV semester II. The modality of offering elective module will be based on the economic size of 10 students enrolling for a particular elective and the availability of faculty to teach.

Table 1: List of Elective Modules with contact hours and mark distribution

Sl. No	Code	Name of the Module	Contact Hours			Credits	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	MDD407	Product Design & Development	3	1	0	12	25	75	0	100
2	MDD408	Tribology	3	1	2	12	25	50	25	100
9	EDP101	Entrepreneurship	2	0	2	12	80	20	0	100

## 7.3 Module Matrix for B.E. in Surveying and Geoinformatics Engineering.

### Year 1 – Semester I

Sl. No	Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	BSR104	Introduction to Surveying and Computation	12	3	0	3	25	50	25	100
2	RST101	Basic Remote Sensing	12	3	1	0	30	70	0	100
3	GIS101	Geographic Information System	12	3	0	3	25	50	25	100
4	CAS101	Computer Applications in Surveying*	12	1	1	3	50	50	0	100
5	ACS101	Academic Skills*	12	2	0	2	100	0	0	100
<b>Total</b>			<b>60</b>	<b>12</b>	<b>2</b>	<b>11</b>	<b>230</b>	<b>220</b>	<b>50</b>	<b>500</b>

### Year 1 – Semester II

Sl. No	Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	GNS101	Introduction to GNSS	12	3	0	3	25	50	25	100
2	RST102	Basic Photogrammetry	12	3	0	2	25	50	25	100
3	GDS101	Geodesy-I	12	3	1	0	25	75	0	100
4	AMA102	Applied Mathematics I*	12	3	1	0	25	75	0	100
5	DZG101	Dzongkha Communication*	12	2	2	0	50	50	0	100
<b>Total</b>			<b>60</b>	<b>14</b>	<b>4</b>	<b>5</b>	<b>150</b>	<b>300</b>	<b>50</b>	<b>500</b>

## Year 2 – Semester I

Sl. No	Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	CAS206	Total Station Surveying	12	3	0	3	25	50	25	100
2	RST204	Digital Photogrammetry	12	3	1	2	25	50	25	100
3	GDS203	Geodesy - II	12	3	0	0	25	75	0	100
4	AMA103	Applied Mathematics II*	12	3	1	0	25	75	0	100
5	SYS210	Python Programming	12	3	1	2	20	40	40	100
<b>Total</b>			<b>60</b>	<b>15</b>	<b>3</b>	<b>7</b>	<b>120</b>	<b>290</b>	<b>90</b>	<b>500</b>

## Year 2 – Semester II

Sl. No	Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	P	P	
1	CAS208	Construction Surveying	12	3	0	3	25	50	25	100
2	RST205	Digital Image Processing	12	3	0	3	25	50	25	100
3	GDS204	Map Projection	12	3	1	0	25	75	0	100
4	AMA204	Applied Mathematics III*	12	3	1	0	25	75	0	100
5	SYS211	Database Management System	12	3	1	2	20	40	40	100
<b>Total</b>			<b>60</b>	<b>15</b>	<b>3</b>	<b>8</b>	<b>120</b>	<b>290</b>	<b>90</b>	<b>500</b>



### Year 3 – Semester I

Sl. No	Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	GIS102	Cartography*	12	3	0	2	25	50	25	100
2	RST306	Advanced Remote Sensing- I	12	3	1	0	30	70	0	100
3	GNS103	GNSS and its Application	12	3	0	3	25	50	25	100
4	AMA307	Fundamentals of Geo-statistics	12	3	1	0	30	70	0	100
5	GIS304	GIS Data Analysis and Modelling	12	2	0	3	30	45	25	100
<b>Total</b>			<b>60</b>	<b>14</b>	<b>2</b>	<b>8</b>	<b>140</b>	<b>285</b>	<b>75</b>	<b>500</b>

### Year 3 – Semester II

Sl. No	Module Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	SAA301	RS and GIS for Agriculture and Forestry	12	3	0	0	50	50	0	100
2	RST307	Advanced Remote Sensing - II	12	3	0	2	25	50	25	100
3	SAA302	Geological Remote Sensing and Techniques	12	3	0	0	50	50	0	100
4	SAA303	RS and GIS for Disaster Management	12	3	0	0	50	50	0	100
5	PRW302	Basic Research Method and Seminar*	12	1	2	0	100	0	0	100
<b>Total</b>			<b>60</b>	<b>13</b>	<b>2</b>	<b>2</b>	<b>275</b>	<b>200</b>	<b>25</b>	<b>500</b>

### Year 4 – Semester I

Sl. No	Module Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	LPS201	Legal Principles of Surveying*	12	3	1	0	30	70	0	100
2	SAA404	RS and GIS for Environmental Engineering	12	3	0	0	50	50	0	100
3	SAA405	RS and GIS for Urban and Regional Planning	12	3	0	0	50	50	0	100
4	EDP101	Entrepreneurship*	12	2	2	0	80	20	0	100
5	PRW405	Project Work*	VII and VIII Sem.			1	Proposed presentation and 1 <sup>st</sup> review		20	20
<b>Total</b>			<b>48</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>210</b>	<b>190</b>	<b>20</b>	<b>420</b>

### Year 4 – Semester II

Sl. No	Module Code	Module Name	Credit	Time Allocation			Assessment			Total Marks
				L	T	P	CA	EX	P	
1	EEA101	Engineering Economy*	12	3	0	2	40	50	10	100
2	GIS405	Web GIS	12	3	0	0	50	50	0	100
3	OJT402	Internship and Seminar*	12	Min. 45 days (internal 60 and external examiner 40 marks respectively)						100
4	RST408	Unmanned Aerial System	12	2	0	2	25	50	25	100
5	PRW405	Project Work*	24	0	0	1	Ongoing review, report & guide assessment		80	80
<b>Total</b>			<b>72</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>115</b>	<b>150</b>	<b>115</b>	<b>480</b>

## 7.2 Module Matrix for Diploma in Civil Engineering

Year I Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	MAT101	Engineering Mathematics	3	1	0	12	25	75	0	100
2	CWP101	Civil Engg. Workshop Practice	0	0	6	12	0	0	100	100
3	EGP101	Engineering Graphics	1	0	5	12	50	50	0	100
4	TOS101	Engineering Mechanics	2	1	2	12	25	50	25	100
5	BCM101	Building Construction and Materials	2	1	2	12	25	50	25	100
6	ACS101	Academic Skills	2	0	2	12	100	0	0	100
Total			10	5	15	72	225	225	150	600

### Year I Semester II

1	TOS102	Strength of Materials	3	1	0	12	25	75	0	100
2	BPD101	Civil Engineering Drawing	1	0	4	12	50	50	0	100
3	SRY102	Surveying	2	1	3	12	25	50	25	100
4	DZG101	Dzongkha Communication	2	2	0	12	50	50	0	100
5	FOE101	Soil Mechanics and Foundation Engineering	3	1	2	12	25	50	25	100
Total			11	5	9	60	175	275	50	500

Year II Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	TOS203	Structural Mechanics	3	1	0	12	25	75	0	100
2	BPD202	Estimating and Costing	3	2	0	12	50	50	0	100
3	BPD203	Structural Detailing and Drawing	1	0	4	12	0	50	50	100
4	FLM201	Fluid Mechanics	3	1	2	12	25	50	25	100
5	HWE201	Highway Engineering	3	1	2	12	25	75	0	100
Total			13	5	8	60	175	275	50	500

### Year II Semester II

1	MNG201	Principle of Management	3	1	0	12	25	75	0	100
2	EVE201	Environmental Engineering	3	1	2	12	25	50	25	100
3	TOS204	Structural Engineering	3	1	0	12	25	75	0	100
4	EVE202	Irrigation Engineering	3	1	0	12	25	75	0	100
5	PRW201	Project Work	0	0	3	12	75	25	0	100
6	OJT201	On The Job Training & Seminar	0	0	1	12	50	50	0	100
<b>Total</b>			12	4	6	72	225	350	25	600

### 7.3 Module Matrix for Diploma in Electrical Engineering

Year I Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	EGP101	Engineering Graphics	1	0	5	12	50	50	0	100
2	DZG101	Dzongkha Communication*	2	2	0	12	50	50	0	100
3	EEC101	Basic Electronics	3	1	2	12	25	50	25	100
4	BEE101	Basic Electrical Engineering	3	1	2	12	25	50	25	100
5	EWP101	Electrical Workshop Practice –I	0	0	4	12	0	0	100	100
TOTAL			9	4	13	60	150	200	150	500

#### Year I Semester II

1	MAT101	Engineering Mathematics	4	0	0	12	25	75	0	100
2	ACS101	Academic Skills*	2	2	0	12	100	0	0	100
3	EDE101	Electrical Design Drawing and Estimation – I	1	0	3	12	50	50	0	100
4	EMI101	Electrical Measurements and Instrumentation	3	1	2	12	25	50	25	100
5	EMC101	Electrical Machines - I	3	1	2	12	25	50	25	100
6	EWP102	Electrical Workshop Practice – II	0	0	4	12	0	0	100	100
<b>TOTAL</b>			13	4	11	72	225	225	150	600

Year II Semester I			Contact Hours			Credits	Marks			
							Theory		P	Total
Sl. No	Code No	Module Name	L	T	P		CA	EX	CA	
1	MNG201	Principles of Management	3	1	0	12	25	75	0	100
2	PSY201	Power System-I	3	1	0	12	25	75	00	100
3	EMC202	Electrical Machines – II	3	1	2	12	25	50	25	100
4	PEL201	Power Electronics	3	1	2	12	25	50	25	100
5	EDE202	Electrical Design Drawing and Estimation- II	1	0	3	12	50	50	0	100
TOTAL			13	4	7	60	150	300	50	500

#### Year II Semester II

1	CSY201	Control System	3	1	2	12	25	50	25	100
3	PSY202	Power System – II	3	1	0	12	25	75	0	100
2	PSY203	Switchgear and Protection	3	1	2	12	25	50	25	100
4		Elective	3	1	0	12	25	75	0	100
5	PRW201	Project Work	0	0	2	12	0	0	100	100
6	OJT201	On the Job Training and Seminar	0	0	1	12	50	50	0	100
<b>TOTAL</b>			12	4	7	72	150	300	150	600

**Electives:**

1. EDP201 Entrepreneurship Development\*
2. AKS101 Analytical Skills\*
3. PSY205 Utilization and Traction
4. EMA202 Energy Management and Auditing\*\*
5. CEG204 Communication Engineering
6. EVS201 Environmental Science
7. PSY204 Hydro Power Engineering
8. RER201 Renewable Energy Resources Development Technology

\*University wide module

\*\* Denotes pre-existing modules in ECE and BE Power Engineering.

## 7.4 Module Matrix for Diploma in Mechanical Engineering

Year I Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	EGP101	Engineering Graphics	1	0	5	12	50	50	0	100
2	TOS101	Engineering Mechanics	2	1	2	12	25	50	25	100
3	WTG101	Workshop Technology	3	0	2	12	25	50	25	100
4	WEL101	Welding Technology	3	0	4	12	25	50	25	100
5	DZG101	Dzongkha for communication	2	2	0	12	50	50	0	100
Total			11	3	13	60	175	250	75	500

### Year I Semester II

1	ACS101	Academic Skill	2	2	0	12	100	0	0	100
2	MAT101	Engineering Mathematics	4	0	0	12	25	75	0	100
3	TDS101	Thermodynamics	3	1	0	12	25	75	0	100
4	MED101	Mechanical Engineering Drawing	1	0	5	12	0	50	50	100
5	EGM101	Engineering Materials	3	0	2	12	25	50	25	100
6	WTG102	Workshop Theory & Practice – I	3	0	4	12	25	50	25	100
<b>Total</b>			<b>16</b>	<b>3</b>	<b>11</b>	<b>72</b>	<b>200</b>	<b>300</b>	<b>100</b>	<b>600</b>



Year II Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	MNG201	Principle of Management	3	1	0	12	25	75	0	100
2	ENC201	Mechanical Estimating & Costing	3	1	0	12	25	75	0	100
3	HPM201	Fluid Power	3	0	3	12	25	50	25	100
4	HPM202	Hydraulic & Hydraulic Machines	3	1	2	12	25	50	25	100
5	WTG203	Workshop Theory & Practice – II	1	0	5	12	25	0	75	100
Total			13	3	10	60	125	250	125	500

#### Year II Semester II

1	CSY202	Industrial Drives & Control	3	1	2	12	25	50	25	100
2	AME201	Automobile Engineering	3	0	3	12	25	50	25	100
3	TOM201	Theory of Machines	3	1	0	12	25	75	0	100
4	Elective	3	1	*1	12	25	75	0	100	100
5	OJT201	On the Job Training and Seminar	0	0	1	12	0	0	100	100
6	PRW201	Project work	0	0	2	12	0	0	100	100
<b>Total</b>			<b>12</b>	<b>3</b>	<b>9</b>	<b>72</b>	<b>100</b>	<b>250</b>	<b>250</b>	<b>600</b>

#### Electives:

1. ACR201 Refrigeration & Air Conditioning
2. CTE201 Construction Equipment
3. RES201 Renewable Energy System
4. FPM101 Farm Power and Machinery
5. IEM201 Industrial Engineering & Management
6. EDP201 Entrepreneurship Development
7. EVS201 Environmental Science

## 7.5 Module Matrix for Diploma in Computer System and Network

Year I Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	MGT101	IT Fundamentals and Office Productivity Tools	2	0	2	12	50	0	50	100
2	SYS101	Fundamentals of Programming with C	3	1	2	12	30	40	30	100
3	SYS102	Introduction to Database	4	1	2	12	30	40	30	100
4	MAT101	Engineering Mathematics	4	0	0	12	25	75	0	100
5	ACS101	Academic Skills	2	2	0	12	100	0	0	100
Total			15	4	6	60	235	155	110	500

### Year I Semester II

<b>1</b>	HDW101	Computer Hardware Troubleshooting and Maintenance	3	0	3	12	30	20	50	<b>100</b>
<b>2</b>	SYS103	Fundamentals of Server Technology	3	1	2	12	30	30	40	<b>100</b>
<b>3</b>	NET101	Physical Networking	2	1	4	12	30	20	50	<b>100</b>
<b>4</b>	NET102	Internetworking Protocols and Standards	5	1	1	12	30	60	10	<b>100</b>
<b>5</b>	DZG101	Dzongkha Communication	2	2	0	12	50	50	0	<b>100</b>
<b>Total</b>			<b>15</b>	<b>6</b>	<b>9</b>	<b>60</b>	<b>170</b>	<b>180</b>	<b>150</b>	<b>500</b>

Year II Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	NET203	Routing and Switching	2	1	3	12	30	20	50	100
2	SYS204	Linux System Administration	3	1	3	12	30	30	40	100
3	SYS205	Windows Server Administration	3	1	2	12	30	30	40	100
4	SYS206	System Analysis and Design	4	3	0	12	30	60	10	100
5	SYS207	Web Technology and Design	3	1	3	12	30	30	40	100
Total			15	7	11	60	150	170	180	500

#### Year II Semester II

1	MGT202	Information Security Management	3	1	3	12	30	30	40	100
2	SYS208	Linux Network Services Administration	3	1	3	12	30	30	40	100
3	SYS209	Windows Active Directory	3	1	3	12	30	20	50	100
4	NET204	Network Design and Management	3	1	3	12	30	30	40	100
5	PRW201	Project	0	0	3	12	0	0	100	100
Total			12	4	15	60	120	110	270	500

## 7.6 Module Matrix for Diploma in Electronics & Communication Engineering

Year I Semester I			Contact Hours			Credits	Marks			
Sl. No	Code No	Module Name	L	T	P		Theory		P	Total
							CA	EX	CA	
1	DZG101	Dzongkha Communication	12	2	0	0	25	75	0	100
2	OSH101	Occupational Health and Safety	12	2	1	2	45	30	25	100
3	EEE101	Electrical Technology	12	3	1	2	25	50	25	100
4	CNE101	Fundamental of Computer and Programming in C	12	2	0	3	40	30	30	100
5	EEE102	Electronic Devices and Circuits	12	3	1	2	25	50	25	100
Total			60	12	3	9	160	235	105	500

### Year I Semester II

1	AMA101	Applied Mathematics	12	3	1	0	25	75	0	100
2	TCE101	Analog and Digital Communication	12	2	1	2	25	50	25	100
3	ICE101	Instrumentation and Process Control	12	3	1	2	25	50	25	100
4	CNE102	Data Communication and Networking	12	2	1	3	20	40	40	100
5	ACS101	Academic Skills	12	2	0	2	100	0	0	100
6	EEE103	Digital Electronics and Logic Circuits	12	2	1	2	25	50	25	100
Total			72	14	5	11	220	265	115	600

**Note:**

The modules marked with “ \* ” are the modules adopted from the validated programme of other programmes (Civil, Electrical, Mechanical, Computer Systems and Networks)

L= Lecture	T= Tutorial	P= Practical
CA= Continuous Assessment	EX= End Semester Examination	

**Electives:**

1. EDP201 Entrepreneurship Development
2. TCE205 Satellite Communication and Radar Engineering
3. ICE204 Biomedical Instrumentation
4. NET203 Switching and Routing

## 7.7 Module Matrix for Diploma in Surveying

### First Year Semester I

Sl. No.	Module Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	MAT101	Engineering Mathematics *	3	1	0	12	25	75	0	100
2	SRY101	Fundamentals of Surveying	2	1	3	12	25	50	25	100
3	SRY102	Computations and Field Surveying –I	2	1	3	12	25	50	25	100
4	ACS101	Academic Skills *	2	0	2	12	100	0	0	100
5	SRY103	Computer Applications in Surveying	1	0	3	12	50	50	0	100
6	MGT101	IT Fundamentals and Office Productivity Tools *	2	1	4	12	30	30	40	100
Total			12	4	15	72	255	255	90	600

### First Year Semester II

Sl. No.	Module Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	SRY104	Computation and Field Surveying –II	2	1	3	12	25	50	25	100
2	SRY105	Engineering Survey	2	1	3	12	25	50	25	100
3	DZO101	Dzongkha*	2	0	1	12	50	50	0	100
4	CTR101	Cartography	3	1	0	12	25	75	0	100
5	LDD101	Land Development and Site Design	3	1	0	12	25	75	0	100
Total			12	4	7	60	150	300	50	500

## Second Year Semester I

Sl. No.	Module Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	GEO201	Principles and Application of GIS	2	0	3	12	25	50	25	100
2	SRY206	Computation and Field Surveying-III	2	1	3	12	25	50	25	100
3	GEO202	Geodesy	3	1	0	12	25	75	0	100
4	GEO203	Principles and Application of GNSS	2	1	2	12	25	50	25	100
5	GEO204	Photogrammetry and Remote sensing	3	0	2	12	25	50	25	100
Total			12	3	10	60	125	275	100	500

## Second Year Semester II

Sl. No.	Module Code	Name of the Module	Contact Hours			Credit	Marks			
			L	T	P		Theory		P	Total
							CA	EX	CA	
1	POM101	Principles of Management*	3	1	0	12	25	75	0	100
2	SRY207	Surveying Analysis and Adjustment	3	1	0	12	25	75	0	100
3	LPS201	Legal Principles of Surveying	3	1	0	12	25	75	0	100
4	SRY208	Survey Camp	0	0	1	12	50	50	0	100
5	PRW201	Project	0	0	3	12	75	25	0	100
Total			9	3	4	60	200	300	0	500

**Note:** L: Lecture T: Tutorial P: Practical CA: Continuous Assessment EX: Exam

\* Denotes a pre-existing module in another department (Civil, Mechanical, Electrical and IT) at JNEC which will be adopted for the Diploma Programme in Surveying.

## 7.8 Module Matrix for Diploma in Materials and Procurement Management

### First Year – Semester I

Sl No	Module Code	Name of Module	Credit	Contact Hours			Marks distribution			
							Theory		Pract	Total
				L	T	P	CA	Ex	CA	
1	ACC101	Basic Accounting	12	3	1	0	50	50	0	100
2	MAS101	Materials and Specifications	12	2	1	2	25	25	50	100
3	ECO101	Basic Economics	12	3	1	0	25	75	0	100
4	MGT101	IT Fundamentals and Office Productivity Tools	12	2	0	2	50	-	50	100
5	MAM101	Materials Management	12	3	1	0	25	75	0	100
		Total	60	13	4	4	175	225	100	500

### First Year – Semester II

Sl No	Module Code	Name of Module	Credit	Contact Hours			Marks distribution			
							Theory		Pract	Total
				L	T	P	CA	Ex	CA	
1	DZG101	Dzongkha for Communication*	12	2	2	0	50	50	0	100
2	PCM101	Purchase Management	12	2	1	2	25	50	25	100
3	ACS101	Academic Skill *	12	2	2	0	100	0	0	100
4	MAM102	Inventory Management	12	3	1	0	25	75	0	100
5	MAT102	Statistics	12	2	1	2	25	50	25	100
		Total	60	11	7	4	225	225	50	500



### Second Year – Semester III

Sl No	Module Code	Name of Module	Credit	Contact Hours			Marks distribution			
							Theory		Pract	Total
				L	T	P	CA	Ex	CA	
1	DBM201	Database Management	12	2	1	2	30	50	20	100
2	PCM202	Introduction to Procurement Rules and Regulations	12	2	1	2	25	25	50	100
3	MAM203	Warehouse Management	12	3	1	0	25	75	0	100
4	ACC202	Tally	12	2	0	3	50	0	50	100
5	MNG202	Principles and Practices of Management	12	3	1	0	25	75	0	100
		Total	60	12	4	7	155	225	120	500

### Second Year – Semester IV

Sl No	Module Code	Name of Module	Credit	Contact Hours			Marks			
							Theory		Pract	Total
				L	T	P	CA	Ex	CA	
1	LGM201	Logistics Management	12	3	1	0	25	75	0	100
2	NGS201	Negotiation Skills	12	3	1	0	0	0	100	100
3		Elective	12	3	1	0	25	75	0	100
4	OJT201	On-the-Job Training	12	0	0	1	100	0	0	100
5	PRW201	Project Work	12	0	1	3	100	0	0	100
		Total	72	9	4	4	250	150	100	500

## **Elective Modules for Diploma in Materials & Procurement Management:**

1. UHV401 Universal Human Values and Professional Ethics\*
2. ASK101 Analytical Skills\*
3. EDP201 Entrepreneurship Development\*

### **8. Code of Learning and Teaching Practice - Responsibilities of Student**

*Students of the university have the following responsibilities to:*

- a) apply themselves to their studies to the best of their abilities;
- b) become familiar with the rules and regulations governing the degree in which they are enrolled, and to ensure that the modules selected meet the award requirements;
- c) be aware of the policies, practices and expectations of the university set out in the RUB Wheel of Academic Law (RUB 2008) and of any College/College and department in which they are enrolled and which are contained in the module materials and information made available to them;
- d) be aware of, and act according to, the rules and regulations concerning the use of College/College computing, library and other facilities, and so to respect the rights of the other learners;
- e) meet deadlines for modules work to be submitted;
- f) take the initiative and consult appropriately when problems arise in any module;
- g) submit original work for assessment without plagiarizing or cheating;
- h) attend all organized teaching /learning activities, including professional placements, for each module in which they are enrolled (on-campus students) and, for distance education students, to consider thoroughly all program materials and participate in all prescribed residential schools;

- i) accept joint responsibility for their own learning along with the teaching staff;
- j) provide feedback to staff about (a) teaching and learning practices and (b) the quality of modules as well as to contribute to the development of university programs and policies as appropriate;
- k) abide by the University's policies on occupational health and safety so that they can study in safe and healthy environment;
- l) be aware of the university's commitment to equal opportunity and to demonstrate tolerance and respect for all members of the university community including respect of the right of staff members to express views and opinions; and
- m) respect the working environment of others in all areas of the university.

**Note: Infringement of responsibilities d) and g) may lead to disciplinary action.**

## 9. Student Forum

### 9.1 Objectives

The main objectives of the forum are to:

- i. enhance the students' participation in the co-curricular activities;
- ii. encourage greater participation in the governance of the college;
- iii. provide opportunity for students to hone their planning, coordination, negotiation, communication and leadership skills;
- iv. create sense of responsibilities among the students.

Students Forum supports a rich mix of activities and programs such as games, sporting, cultural and social activities which creates an atmosphere of opportunity for students to develop and practice organizational and leadership skills. A broad range of students' activities provides a stimulating environment which enhances personal growth and fosters social and professional development.

The forum provides a wide range of outstanding leadership opportunities for the students of Jigme Namgyel Engineering College by involving students in a wide range of activities. This is achieved by engaging students collaboratively with faculty and staff in developing programs and support systems that reflects diversity; instill self reliance, leadership and sense of responsibility. Through this, enrichment to social and cultural life of the campus and the community is also gained.

- All the students activities shall be conducted in the form of competition amongst four houses (*Taag, Seng, Chung, Druk*)
- Houses can have house flags
- Four House Advisors shall be elected by students of four houses.
- The President, Deans, Students affairs team, club/cultural/literary/games & sports coordinators shall remain independent and shall be excluded from house advisors.

- House Advisors shall play more of advisory roles in the house activities.
- The eligibility criteria for house advisor -all P-Level faculty & staffs
- List of all P-Level staff should be displayed or notified to students
- The term of house advisor is one year.
- House distribution shall be done randomly class-wise according to student enrolment number.
- All the games, sports, literary, cultural, social work programs planned and organized officially through Student Office shall be conducted in the form House Competitions amongst the four houses.
- Points will be awarded as per the positions in the competitions: 200 points will be awarded to the wining house (1<sup>st</sup> position); 150 points to runners up House (2<sup>nd</sup> position); 100 points to 3<sup>rd</sup> House; and 50 points to the 4<sup>th</sup> house.
- The points scored in every competition shall be cumulated over a period of one year and whichever house gets the highest points shall be awarded a cash prize of **Nu.15,000/-** and a **winner's trophy (rolling)** which can be kept in the house advisor's office.
- The second house shall be awarded a cash prize of **Nu.10,000/-**.
- No individual prizes shall be awarded hereafter.
- Only the certificates shall be awarded to 2 winning team members. But in case of cultural competitions no certificates shall be awarded.
- No staff teams shall be allowed to participate in the house competitions.
- Students shall not be allowed to go around staff quarters and/or outside for donations.

- The final prize award for houses will be done on the month of May, two weeks before the End Semester Examination. Therefore the activities shall be planned accordingly.
- The award shall be marked with a cultural show from the students from each house. Each house shall present at least two traditional cultural items on the award day.
- Points for social works shall be declared only at the end.
- For the 1<sup>st</sup> position house a vehicle shall provided to reach items if the winning house wishes to go for picnic.

## 9.2 Student Office Bearers

The following are the various posts:

1. **Chief Councilor** – elected from among 2<sup>nd</sup> year students after every academic year.
2. **Girls' Councilor** — 1 elected from among 2<sup>nd</sup> female students after every academic year.
3. **Four house Councilors** – elected from students at the beginning of the academic session. The four houses are named after the four mythological animals: *Taag, Seng, Chung, Druk*.
4. **Games & Sports Councilor**- elected from students at the beginning of the academic session
5. **PA Systems Councilor** – selected from amongst the students by the college management at the beginning of session.
6. **Prayer Councilor** - selected from amongst the students by the college management at the beginning of session.

### 9.2.1 Terms of References for Student Office Bearers

#### 1. Chief Councilor

- To act as the overall representative for the students.
- To coordinate all the co-curricular activities including chadi preparations, hall arrangement etc during the visits of dignitaries, guests etc.
- To coordinate the conduct of literary & cultural activities in the college with the help of other councilors.
- Serve as an overall-block councilor of the student residential

complex and look after the discipline, cleanliness, care and maintenance of hostels.

- Overall planning, selection of mess coordinators, verification of quantity of items purchased and issued bills and internal auditing of monthly mess expenditures.
- Supervise all the work programmes.
- To look after the general welfare of the students.
- Overall administration & coordination of Students' Welfare Fund (SWF) scheme including election of office bearers to the SWF Scheme.
- Carry out any work assigned by President, Dean Student Affairs, Residence, and other concerned faculties and staffs.

## **2. Girls' Councilor**

- To act as a Vice-Chief Councilor of the college
- To act as a Representative for the girls.
- In case the Chief Councilor is terminated or the post becomes vacant the Girls Councilor will serve as the Chief Councilor till the session is over.
- Serve as an overall-block councilor of the Girls' Hostels and look after the discipline, cleanliness, care and maintenance of the hostels.
- To look after the general welfare of the girls.
- To coordinates all the activities where girls are involved.
- Supervise all the work programmes
- Assist the Students' Chief Councilor in the overall administration & operation of SWF.
- A Vice Girls Councilor (if appointed) shall assist the Girl's Councilor in all her responsibilities side by side.
- Carry out any work given by President, Dean Student Affairs, Residence Coordinator, and other concerned faculties and staffs.

## **4. Other Councilors**

### **8. PA Councilor**

- To look after the sound system efficiently during any functions.
- To provide care and do maintenance of the sound systems.
- To arrange the sound system & lights as and when

required.

- Serve as a block councilor of one block and look after the discipline, cleanliness, care and maintenance of hostels.

### **9. Prayer Councilor**

- to oversee the religious related functions;
- to take care of the religious & other artifacts as issued by the college;
- to submit estimates for the prayer related items if any needed through the Chief Councilor.
- Serve as a block councilor of one block and look after the discipline, cleanliness, care and maintenance of hostels.

### **10. Games Councilor**

- To coordinate all the games & sports activities drawn in the college calendar in consultation with the sports coordinator in the college;
- Serve as a block councilor of one block and look after the discipline, cleanliness, care and maintenance of hostels.

### **11. House councilors**

- To coordinate and organize house related activities;
- to form teams, nominate participants for all house related games & sports, cultural & literary activities;
- supervise/organize routine cleaning works in the Hostels (surroundings, respective rooms, corridors, toilets);
- carryout maintenance works;
- Serve as a block councilor of one block and look after the discipline, cleanliness, care and maintenance of hostels.

#### **9.2.2 Terms and Conditions**

1. All councilors shall be exemplary at all times and in all places.
2. They shall play the role of an ambassador between the students and the college management.
3. They shall play a leadership role in solving any problems related to students.
4. They shall play a mediator's role by being just and fair to every Student without being partial to any Student or



- group/class of students.
5. They shall always try to bring improvement in the student community.
  6. They shall never involve in any disciplinary problem failing which they will be terminated from the post and a new one elected/the candidate who secured the second highest votes shall be offered to replace him/her.
  7. They shall fulfill their manifesto.
  8. They shall abide by what they have uttered in the oath of allegiance.
  9. The college management shall review their performance and decide whether they can continue as councilors and earn an award of appreciation and leadership.

### **9.3 Students Election System**

Chief Councilor, Girls' Councilor and House councilors will be elected from among the 2<sup>nd</sup> year students through vote system.

#### **9.3.1 Election Procedures**

##### **1. Nomination of Candidates**

- We follow a complete democratic process for the election of students' office bearers making it a complete show of the students;
- Candidates can nominate Himself / Herself based on interest;
- Candidates can also be nominated by other students if they feel the candidate can discharge the expected responsibilities of the post of office bearer;
- The staff member also can nominate their candidates for particular post if they feel that some capable candidates are left out by the students.
- Nomination of Candidates for the post of Councilor shall be from 2<sup>nd</sup> year students only.
- Nomination of Candidates for the post of House Councilors shall be from the respective houses only; no students from other houses will be accepted for election to another house's councilor-ship.

- A minimum of two and a maximum of three students shall be nominated from each house to stand for election to respective house councilor-ship.

## **2. Declaration of Nominees**

- List of nominees shall be verified for eligibility
- Declaration of nominees for various posts shall be done on the notified date.
- The election shall be held in the Multi-purpose hall.
- On the final day of election the nominees shall be called in the sequential order of their election to declare what they can do if they are elected.

## **3. Election procedures on the day of election**

- i. It will begin with the election of Students Chief Councilor followed by Girls' Councilor and House Councilors.
- ii. Candidates nominated for each post will be first called and asked to deliver their campaign talks to the general audience.
- iii. This will be followed by distribution of ballot papers to the students and staff to cast their votes.
- iv. A candidate will be declared elected for the given post based on the highest number of votes secured.
- v. The selected councilors for Games & Sports, Prayer and PA Systems will be declared.
- vi. All the successful candidates will receive Tashi Khadhar from the President and take an oath of allegiance. They will also submit their manifesto to the Dean, Student Affairs.

### **9.4 Award**

The Chief Councilor and councilors will be awarded the certificate of leadership at the end of their terms upon exhibition of good leadership and integrity. In case the above post holders do not abide by the above mentioned roles and responsibilities they will be dealt as per the college general rules & regulation and also if repeatedly found guilty the concerned post holder will be terminated from the post with immediate effect without any explanation.

## 9.5 Terms of the office-bearers

The terms of the elected Councilors will be for one academic year.

## 10. Student Support Services

### 10.1 Accommodation and Food

Two types of hostels are available for the student accommodations. One is called the **Non-Self-Catering (NSC) Hostel** and the other the **Self-Catering (SC) Hostel**. Each hostel block is named alphabetically from A to P. Hostel blocks A - J are RH and K - P are SCH.

Students can choose to reside in self-catering hostels (SCH) where they can cook their own food or stay in other RH where cooking facilities are not provided.

For the students residing in the **NSC Hostel**, college has purpose-made kitchen and two dining halls where students can dine. The college has employed 5 cooks to process and serve food in the College Mess. Government scholars are paid a stipend of Nu.1,500 per month and this money is used to meet the food expenses for the students dining in the college mess. Nu.150 is deducted from the stipend every month as nominal Hostel rent.

If the self-funding and In-service students stay in RH, they will have to pay Nu.1,500 for their food expenses in the college mess.

#### 10.1.1 Student Residential Allocation System

1. First preference to stay in the **Non-Self-Catering (NSC) Hostel** (eating in mess) will be given to 1<sup>st</sup> year students (new intake).
2. If there is any balance rooms in the **Non-Self-Catering (NSC) Hostel**, it will be given to 2<sup>nd</sup> year students on the basis of their academic ranking/performance and disciplinary records. This left over rooms will be divided amongst the 8 programmes proportionately.
3. If a 1<sup>st</sup> year student chooses to stay in **Self-Catering (SC) Hostel** he/she will be given an option to stay in the self-catering hostel.

4. Balance rooms in the **Self-Catering (SC) Hostel** will be given to those 2<sup>nd</sup> year students on the basis of their academic ranking/performance and disciplinary records.
5. In case of new students, room allocation in the **Non-Self-Catering (NSC) Hostel** will be done by the Chief Residence Coordinator prior to students' reporting (in consultation with Dean Student Affairs and other Residence Coordinator).
6. 1<sup>st</sup> year students room allocation will be done by allocating a room to students from same schools.
7. The individual list of allocated rooms will be pasted on the notice board and individual hostel room's door before the reporting of 1<sup>st</sup> year students. The overall room allocation notification will be done by the Chief Residence Coordinator. While pasting of individual allocated rooms (based on overall room allocation) on the respective room doors will be done by respective block Residence Coordinator.
8. In case of new students wishing to stay in **Self-Catering (SC) Hostel**, they will be asked to apply to the concerned block Residence Coordinator and get the approval from Dean Student Affairs through standard room application form.
9. Any room once issued, will not be changed, except under extenuating circumstances through proper procedures.
10. However, changing of rooms from **Non-Self-Catering (NSC) Hostel** to **Self-Catering (SC) Hostel** will be allowed, but only within the first one/two weeks of reporting time. Thereafter no changes of room will be entertained.
11. For 2<sup>nd</sup> year students, the allocation of rooms will be done before the summer vacation. Students will be notified in advance to choose their room partner and submit to the Chief Residence Coordinator.
12. All the 2<sup>nd</sup> year students will be required to vacate and hand over their rooms to respective Residence Coordinator (through the standard forms) before leaving the college for vacation, every **June**.
13. All the students, whether it is 1<sup>st</sup> year or 2<sup>nd</sup> year, will have to take over from and/or to respective Residence Coordinator properly to through standard room allocation forms.

## 10.2 Students' Mess

The Students' Mess at JNEC is operated by purely by students themselves with the support from the Dean, Student Affairs, the Accounts Section and Residence Coordinator. It was introduced in August 2008.

The students' mess is operated by a group of three Student representatives from each Department on monthly rotation basis. The selection of Mess Representatives is coordinated by the Student councilors at the beginning of every semester. After the election the decision on which department will run the mess for the first month, second month, third and so on is based on the lucky draw.

Once the Mess Representatives and who run which month are finalized, the Mess Representatives for a particular month withdraws some amount from the accounts section in advance and do their mess shopping every Wednesday afternoons and Saturday's.

All the issues and receipts of materials are done by the three mess representatives for the particular month. Cooking is done by the cooks recruited under the GSP category of Civil Service.

On every purchase of items, the quantity of items purchased must be verified against the bill the mess representatives bring along for constant check and balance.

Every student dining in the College Mess should check if this is being done by the councilors. Otherwise, any other students dining in the mess also must take part in verifying the items upon purchase.

At the end of every month, that is, in the first week of the next month internal auditing must be conducted by the students. Those dining in the College mess must take active role and doing this to ensure proper use of fund spent on food in the mess. Councilors must take lead roles in ensuring that this is carried out. Other students also must take the responsibility of checking if this is being done and report to the college management for timely

intervention. Now that students are no more kids, one must know the duties in the student community and see that proper utilization of fund is happening and bring to the notice of the management if things are not working well.

Of course, this does not mean that the management will remain blind fold. Random checks can be done by the management. But the students being the direct recipient of the service are the best judge and therefore take responsibility either to directly intervene or report the matter to the management.

After the mess account for a particular month is closed, whatever balance amount that is left from their monthly stipend is refunded to the students.

### **10.3 Games, Sports and Recreation**

The college has the following games and sports facilities.

1. One football field with stadium and pavilion
2. Two basket ball courts
3. Two volley ball court
4. One lawn tennis court
5. One Futsal court
6. Two badminton courts
7. Two table tennis boards
8. Carom and chess boards

Other recreational facilities like cable television are also provided. For co-curricular and cultural activities, the College has a purpose-made Multi-purpose Hall.

All the games and sports activities as well as co-curricular activities are planned and organized mainly by students themselves to give liberty and opportunity for students to develop life skills and leadership.

## 10.4 Student Welfare Fund

### 10.4.1 Introduction

The Student Welfare Fund was established in the Summer Semester of 2009 to provide financial support to all the students in bad times.

The introduction of JNEC Student Welfare Fund (SWF) is one of the initiatives of instituting various Student Services for the JNEC students. It is mainly aimed at providing some financial aids to the bona fide students thereby creating a sense of belongingness and pride in their minds toward each other and bringing harmony in the JNEC community at large.

### 10.4.2 Objectives

1. Provide help to the sick students
2. Provide advance to organize various students' activities
3. Provide bereavement solace to JNEC students
4. Provide funds for annual rituals and ceremonies
5. Provide loans to needy JNEC students in emergencies

### 10.4.3 Committee Members

The following officials and students shall represent in the committee:

1. *President*
2. *Dean Student Affair*
3. *Chief Residence Coordinator*
4. *Chairman* (through election from among students)
5. *Treasurer* (through election from among students)
6. *Secretary* (through election from among students)
7. *Other Members* (all councilors and class representatives)

### 10.4.4 Roles and Responsibilities

The three officials from the college shall play advisory roles and help guide in the proper functioning of the Students' Welfare Fund (SWF).

### 1. **Chairman**

- Shall look after the smooth functioning of SWF;
- Shall approve and sanction funds;
- Shall chair the SWF Meetings.

### 2. **Treasurer**

- Shall be appointed from First Year;
- Shall maintain the book of account with proper details of sources, expenditure, dates and signatures for:
  - all collections from all the sources relating to the SWF
  - All expenditures incurred;
- Shall get approval from the chairperson regarding the use of fund;
- Shall discuss with other members how to generate the fund.

### 3. **Secretary**

- Shall assist the chairman;
- Shall coordinate the meetings and activities and maintain records;
- The secretary shall look after the functioning of SWF in the absence of the chairman;
- Report to the board member on the cases reported by **Other Members**.

### 4. **Other Members**

- Shall help in planning and implementing all fund raising activities;
- The class representatives shall plan and coordinate discussions and idea generation with respective classes for any fund-raising activity;
- Shall report the cases of students who need financial support from the SWF to the secretary.



#### 10.4.5 Generation of Fund

The fund shall be raised through the following means:

- Deduction of Nu.10.00 (Ngultrum ten) each from all the students from their monthly stipend every month;
- Other fund raising activities;
- Sale of waste food;
- Sale of containers and gunny bags.

#### 10.4.6 Maintenance and Operation of Students Welfare Fund

The fund raised through various means mentioned in above sections shall be deposited in a joint account opened in the Bank of Bhutan through a Ledger. The joint account shall be opened in the name of the Chairman, Secretary and the Treasurer. These three members shall be called hereinafter as the **Joint Account Operators (JAOs)**. The JAOs shall be the signatories for any withdrawal from SWF Bank Account.

Whatever amount is deposited shall be posted in the Ledger maintained by the Treasurer with proper details of its source, date and signature of concerned donor/depositor/activities.

Whatever amount is paid out or spent shall also be posted in the same Ledger book with proper details of the amount spent, bills, date of spending and signature of receiver.

At the end of each academic year the Students' Welfare Fund shall be audited by a committee consisting of members other than the JAOs and the account shall be updated. The updated account with all the supporting documents and details shall be handed over by the outgoing JAOs to the newly appointed JAO members. Also the outgoing JAO shall intimate Bank of Bhutan on the transfer of Joint Account to newly elected JAOs along with their (new JAOs) sample signatures, for resumption of joint accounts.

#### 10.4.7 Ceilings for various Financial Aids

##### 1. Sick Student(s)

- Shall receive benefit from S.W.F, only if he/ she is admitted to hospital based on medical report.
- The following shall be the ceiling for the allocation of benefit

- For 1 or 3 days of hospitalization a maximum of Nu.240.00 only per day shall be granted.
- Between 4 days to one week of hospitalization a maximum of Nu.150.00 only shall be granted on top of Nu.240.00.
- Referral cases, who are in not in a position to walk on their own or who have to be evacuated under emergency, shall be given a fixed amount of Nu.1500.00 only.
- Referral cases that are fit to walk on their own but cannot afford their travel expenses shall be granted support subject to committee member's approval. However, the maximum amount shall be limited to Nu.750.00 only.

## **2. Bereavement (Semso)**

- In the event of expiry of JNEC Student's parents (father and mother only) they will be granted a sum of Nu.5000.00 only as *Semso* from the SWF.
- For the demise of a JNEC student, a fixed amount of Nu.5000.00 only shall be given as *semso* from SWF to their parents or immediate guardians.

## **3. Emergency Loan**

In case of serious illness of parents *or other emergency need for travel as may be found valid and necessary by the committee*, an interest free loan may be granted under condition of written undertaking of immediate repayment after return. The amount for this benefit shall be limited to a maximum of Nu.800.00 only.

The approval for this particular benefit shall be subject to the availability of a minimum of 70% of the total semester's collection. This is mainly to protect the fund from being emptied and maintain a minimum base reserve in the account.

## **4. Advances for Students' Activities**

- Advances may be paid for Student' activities that could generate some revenue;
- A maximum of Nu.2000.00 only shall be approved for sanction. However, the advance so availed shall be reimbursed within three days of the conduct of such activity.

## 10.5 Library Services

The College has purpose made Library building with well equipped books and various collections of Journals, reference books, newspapers and magazines. Students and staff are allowed to borrow books as per the library rules.

The library has web based library system. All the students must obtain membership to the library service. A membership fee of **Nu.50** will have to be paid.

### 10.5.1 Objectives

For the smooth functioning of the library and to make effective and optimum use of resources and services, the library has adopted a number of policies and procedures.

### 10.5.2 Membership

All students, academic and administrative staff of the College are members of the library.

### 10.5.3 General Library Regulations

1. The library is intended to be a place for quiet study. Silence must be observed strictly in the library.
2. Food and Drinks are not permitted in the library.
3. Members are requested to keep their personal belongings (bags, umbrella, book etc) on the shelves provided at the entrance to the library. Such personal belongings should not be carried inside the library hall. Personal belonging kept on the storage shelves at the entrance to the library are at the owner's risk.
4. Care must be taken of all library items and materials. No users may mark, mutilate or annotate books, and any marking or damage found must be reported to the Librarian.
5. No items may be borrowed on behalf of another user without the presentation of a written request signed by the users in whose name the item is to be borrowed.(It is registered borrower's responsibility to ensure that others do not use their library cards.)

6. A bell will be rung ten minutes before closing time and all users must vacate the premise.
7. Mobile Phones must be kept on silence mode while inside the library.
8. Members should contact the library staff for guidance if they face any difficulties in locating any resources in the library.

### **10.5.3 Library Timings**

Monday – Friday:	8:00AM to 7:00 PM.
Saturday:	8:00AM to 12:00 Noon.
Sunday:	Library Remain Closed.

### **10.5.4 Circulation**

1. Students will be provided with a maximum of ONE user cards, with which they can take 6 books at a time.
2. No one will be allowed to hire the news papers, periodicals etc. until the fresh issue has arrived in the library.
3. User's cards are not transferable. It is the registered member's responsibility to ensure that others do not use their cards.
4. If the item is not returned within 30 days from the date on which the user concerned is notified, the item will be billed for replacement.
5. Materials should be returned to the RETURN/RENEW desk before one month.
6. Books which are returned as a Reference will not be issued from the library instead user will come to the library and refer in the library only.
7. Items must be renewed in person at library online system or at the Return/Renew desk.
8. Library material is due on the library online system through the mailing system and everyone has to have JNEC mail register from IT Department.

9. In case the due date falls on non working days, the overdue fines will be charged from the next working day onward and will accumulate each day until the materials are returned or reported missing at the Circulation Desk.

### **10.5.5 Loan Duration**

The Loan period that applies for various categories of users are as follows:

- Students: **1 Month**
- Academic and Administrative Staff: **2 Months** (End of Every Semester).

### **10.5.6 Loss, Damage and Fines**

Borrowers shall be held responsible for any loss, damage or disfigurement to the materials (Books, Journals, and CDs etc.) Under their care and shall be required to pay double the cost of replacing or repairing such materials.

- NU.1 per book per day for the first 5 day and per book per day till the 30<sup>th</sup> day. After 30<sup>th</sup> day, if the book is not returned to the RENEW/RETURN desk the book will be considered lost and appropriate fines levied.
- If the Book is damaged beyond usability then the pervious borrower have to either replace it with the new one or pay the full cost of the book and additional 50% of cost as damage penalty.
- In case of lost item all borrowers are subject to a sum equivalent to the cost of the book lost plus late charges and physical processing fees of NU.50.
- The books taken by the staff should be return compulsorily at the end of every semester, if someone fails to return then he/she have to pay the late fines same as specified for students.

## **10.6 IT Services**

The College has computer labs for students to use and develop

computer skills. Also the college has 24 hours internet LAN services. Students' hostels are connected with wireless network for students to browse internet.

### **10.7 College Cafeteria**

The college has a cafeteria for the students to eat and buy stationary items.

### **10.8 Student Convenience Center**

The college has Convenience store for students to procure all stationary items. The convenience store also provides services such as printing and binding, Xerox, fax, etc.

### **10.8 Clubs/Groups Activities**

Students at JNEC are encouraged to form clubs for the benefit of college, local communities and students. In order to establish any club at JNEC, students are required to follow the *Guidelines for Establishing Clubs* and get the approval from the Dean of Student Affairs.

There are various clubs and groups in the college for the students to provide extra help to the society and JNEC community.

#### **10.8.1 Electrical Maintenance Group**

This group is responsible for carrying out electrical related maintenance works in the college. It is lead by Electrical Maintenance In-charge with selected Power and second year electrical students.

#### **10.8.2 Civil Maintenance Group**

This group is responsible for carrying out civil related maintenance works in the college. It is lead by a staff and 2<sup>nd</sup> year civil students are selected for this group.

#### **10.8.3 Mechanical Maintenance Group**

This group is responsible for carrying out Mechanical related maintenance works in the college. It is lead by a staff and selected second year CSN students.

#### 10.8.4 IT Maintenance Group

This group is responsible for carrying out networking, laptop repair and formatting, installations of new software, lab computer maintenance of the college and students. The group is lead by a faculty advisor and selected second year students of IT department.

#### 10.8.5 JNEC Helping Hands

The college believes in providing holistic education, an education embedded with GNH values.

The college wishes to take advantage of its facilities in helping the communities in the vicinity to live easier lives and thus aspires to put GNH into practice.

The **Helping Hand** was officially formed on November 22. 2011.

The unit comprise of the following members:

1. President as Chairman
2. Staff Coordinator
3. Student Secretary
4. 29 students and 4 staffs as working members

The members are inducted purely on voluntary basis and all the members are highly committed.

#### Objectives:

- To help financially/physically disadvantaged individual in and around the community
- To provide financial and other help to school going children in distress
- To work for holistic benefit of the community

#### 10.8.6 Rover Scouts

This body provides a platform for those students who were scouts in their previous schools to continue practicing their scouts mandates. Also other students who were not scouts before can enroll if they wish to change themselves into a responsible citizen.

Its main aim is to contribute to the development of young people in achieving their full physical, intellectual, social and spiritual

potentials as individuals, as responsible citizens and as members of their local, national and international communities.

Membership is open to all the bonafide students of the college irrespective of gender.

### 10.8.7 JNEC Media

Established officially in April 2017. The Media Club aims to enhance the creativity and innovation of the students in the field of digital media and entertainment.

#### **Objectives of Media Club are:**

- To initiate training and programs related to media such as photography and film editing among the students.
- To entertain as well as conduct awareness programme for the college students, faculty, staff, community and broaden their insights on current affairs.
- To support our culture and tradition as our club will be producing things related to our country.

### 10.8.8 e-Club

The Entrepreneurship Club (e-Club) of the college was introduced in 2014 intended to provide our students with essential platform in entrepreneurship skills and experience that affect the propensity of individuals to become entrepreneurs and the likelihood of their success. The Club is headed by an appointed faculty member and a student's representative coordinator. Currently, there are 32 members with a wide range of talents, interests and skills in the business.

#### **The objectives of e-Clubs are**

- To create an entrepreneurship culture amongst the students in the college.
- To unite young entrepreneurs with a common mindset in business, through building relationships, networking and mentoring.



- To work towards generation for the sustenance of the center Encouraging the youths to become entrepreneurs through learning by doing.
- To create an awareness on entrepreneur opportunities to local communities

### 10.8.9 JNEC Y-Peer

JNEC Y-Peer was established with aim to empower young college students and provide resources and platforms to define their own future and bring about positive and sustainable change in their own lives.

#### **The objectives of Y-Peer Club are:**

- To enable youth in meaningful participation in decision making.
- To address substance abuse, mental health issues, overall health and provide basic counseling
- To facilitate discussions on creation and maintenance of personal wellness and related life-skills.
- To facilitate in developing self-awareness through yoga and mindfulness, as well as peer education programs.
- To conduct interactive education program on stress, time management and coping skills for the students as a part of co-curricular activities.
- To conduct advocacy on healthy relationships, depression, suicide prevention, family problems, healthy sexuality and, pregnancy through abstinence and contraceptive use.
- To empower young people to resist the pressure to engage in sexual activity and general female/male health issues, in relationships and reproductive health.

### 10.8.10 Publication Unit

Many activities related to academic, skill-based and co-curricular are conducted to encourage wholesome education and create a highly competent and innovative technical personnel infused with the values of Gross National Happiness in Jigme Namgyel Engineering College. The Publication Unit of the College is to

inform about the events organized in Jigme Namgyel Engineering College to the relevant stakeholders, organization and in general to the world. The Unit aims to brand the Jigme Namgyel Engineering College through publishing newsletters, e-magazine, journals, pamphlets and participating in awareness programme.

In the past years, Publication Unit has been publishing bi-annual newsletter covering the events occurred in the college to inform people about the skills and knowledge JNEC possess. With the increase in number of programmes offered and strength of the cohorts every year, Publication Unit now publishes monthly e-magazine covering profile story, opinion writing, fiction, non-fiction and other forms of Creative Arts. It is also to instill the essential skills of inquiry and self-expression necessary for citizens of a democracy. In addition, the Unit is also responsible in coordinating college research journals and related publications.

The Unit Comprises of the following members:

1. President as Chairman
2. Dean Research and Industrial linkages as Adviser
3. Faculty Coordinator
4. Faculty Editorial team
5. Student Members

**The objectives of Publication unit are:**

- To publicize on the programmes offered in JNEC and its relevancy in niche market.
- Inform on the academic related activities, co-curricular activities, exchange programmes both national and international level.
- Promote and encourage students' possession of Knowledge, skills and talents apart from the technical modules.
- Improve students' written communication skills and enhance the self-expression skills.

#### **10.8.11 Music Club**

The Music Club aims to encourage and build up confidence of students to perform and gain experiences in crowds and host events.

**The objectives of Music Club are:**

- To develop skills in music.
- To develop an analytical, creative and intuitive understanding of music as a cultural language.
- Enrich the campus and region through concerts, public events, and provide opportunities for traditional and contemporary musical expression by students, faculty, guest artists and member of community.
- To contribute to college by buying the missing musical instruments by conducting concerts at various nearby places.

### 10.8.12 Cultural Club

The cultural club is established to encourage student's interest, participation and responsibility in promoting tradition and culture through providing holistic education.

**The objectives of Cultural Club are:**

- To initiate various cultural program in the college.
- To preserve demolishing culture of the localities and promote through database researches.
- Teach students on the Bhutanese Etiquette (*Driglam Namzha*) and make student capable of conducting any formal celebration in the college (example: Chipdrel, catering, mask dances, etc)
- Represent the college in and outside the campus with college cultural team.

### 10.8.13 JNEC Clean Toilet Initiatives

The club JNEC BTO-unit was officially established with positive feedbacks and unwavering support on 28<sup>th</sup> September, 2017. JNEC BTO-Unit is an initiative of Bhutan Toilet Organization

(BTO), with a motive to create awareness and educate on importance on health and sanitation through clean toilets. The club is executed by group of volunteers from student body guided by club advisor and college management team. The objective of the club is to organize and advocate clean toilet campaign within and outreach of college premise. The club aspires to educate and transform the mediocre minds to work for community clean toilets in the region for safe environment.

**The objectives of JNEC Clean Toilet Initiatives are:**

- To maintain Clean Toilet for staffs at the Administration Building as well as at all the Departmental offices including the College Library and IT Building.
- Monitor and maintain Clean Toilets for all the Students at the Departmental Buildings.
- Advocate cleanliness of Toilets in all the Student Hostels.
- Conduct Mass Toilet Cleaning Programs in the Hostels for the students on weekly basis. Every Friday for the Boarding Hotels and every Saturday for the Self-Catering Hostel.
- Conduct the Clean Toilet Campaign to the nearby communities in Dewathang and Samdrup Jongkhar.
- Update and work closely with the office of Bhutan Toilet Organization and with the College Management or the office of Dean Student Affairs in keeping the Toilets at Jigme Namgyel Engineering College Clean and Hygienic for all.

#### **10.8.14 Maintenance Hobby Club**

Maintenance hobby club is established to promote innovative and effective Troubleshooting and Maintenance Skills.

**The objectives of Maintenance Hobby Club are:**

- Engaging in a hobby leads to acquiring substantial skills, knowledge and experience in the related field of study and individual's interest.

- To inspire students to take up maintenance of equipment and appliances as a hobby and explore their potential to fix the problematic appliances. This will help in sustaining longer life of equipment and minimize the investment in new one vis-a-vis control the environmental impact.
- The club shall work towards encouraging students' participation in maintenance activities as recreational activities thus providing an opportunity for creative troubleshooting and maintenance techniques.

### 10.8.15 Styles Studio

The club aims to provide a good well priced, wowing voluminous changing, color, or cutting hair styles. The club will provide services that shall provide satisfaction and accomplish every expectation that clients want and desire in their hair.

#### **Objectives:**

- To satisfy clients with services related to clean, cut and style hair.
- To strive as a best hair service provider in the college.
- To encourage students to exhibit skills and learn more on hair salon services.

### 10.8.16 Thakor Nyamsum Tshogpa

This club is established to create awareness amongst the students about the environmental problems and how to resolve issues. And also to inculcate love and respect for nature and simultaneously work towards achieving green environment.

#### **The objectives of the club are:**

- To sensitize, create awareness, motivate and educate students about environment conservation.
- To promote greener environment in and around college premises.
- New tree plantation and environment cleanliness activities.
- To carry out joint activities with other clubs.
- To collaborate and work closely with the relevant authorities and organizations.

- Waste management in the campus.

#### **10.8.5 Waste Disposal/Management Club**

This club is a voluntary group formed for proper waste management and contributes in Keeping Bhutan clean in small way. The Royal Society for Protection Nature (RSPN), Thimphu sponsored its establishment the beginning of 2009 summer Semester. It consists of Staff volunteers and Student Volunteers.

Membership to the club is open to all the bonafide students of the college irrespective of gender, provided he/she can render the service to the club without fail whenever necessary.

#### **10.8.6 Yoga & Mindfulness**

The practice of Yoga was introduced in the College from 2012 by Ms. Michelle Walsh, Consultant. The sessions were conducted in the evening for the interested staff and students after the normal classes. In order to sustain the practice of Yoga, the interested staff and students continue with the practice every semester.

#### **The benefits:**

Improve the body structure and lubricate the joints, creating freedom of movement in the joints. It is believed to tone the internal organs and strengthen the nerves, and also improve the functional performance of the organic body.

#### **10.8.7 Universal Human Values**

A course on Universal Human Values is imparted to all the students of JNEC every semester so that students not only learn technical skills but also learn how to be humane. All the students are required to attend this course compulsorily. The college has a core group consisting of staff and students who take care of all the activities related to Human Values.

### **11. Career Prospects**

On successful completion of the degree and diploma courses, graduates are easily placed into jobs. There is no dearth of jobs for JNEC graduates; the only thing is that students must be ready to work hard and have positive attitude.

JNEC has the practice of inviting employing agencies from around the country for campus interviews every year. With this arrangement we were able to place most of the students into jobs.

Also, if anyone is interested to pursue further studies, the JNEC graduates are accepted in many parts of the world for Bachelors programmes, especially in India. Even Malaysia, Poland, Japan, and other overseas countries are now ready to take our graduates. So far, there is no incidence where JNEC's graduated are not accepted anywhere one had ventured to pursue further studies.

### **Contact Numbers for Services**

For Security Services:

<i>Mr. Dechenla</i>	<i>17524562</i>
<i>Mr. Sonam Wangdi</i>	<i>17880337</i>
<i>Mr. Rinchen Penjor</i>	<i>17632178</i>
<i>Mr. Ngawang Thinley</i>	<i>17930665</i>
<i>Mr. Yeshey Dorji</i>	<i>17450951</i>
<i>Mr. Dorji Wangchuk</i>	<i>77424231</i>
<i>Mr. Sangay Dorji</i>	<i>17445259</i>

For Emergency College Vehicle Services:

<i>Mr. Sonam Tashi (Driver)</i>	<i>17688466/77422392</i>
<i>Mr. Tandin Tshewang (Driver)</i>	<i>17668361</i>
<i>Mr. Galay Wangchuk (Driver)</i>	<i>17302954</i>

## **Contact Numbers of Key Officials**

<i>President</i>	<i>07-260289/07-260286</i>
<i>Dean Student Affairs</i>	<i>07-260298</i>
<i>Dean Academic Affairs</i>	<i>07-260299</i>
<i>Dean Research &amp; Industrial Linkages</i>	<i>07-260202</i>
<i>Administrative Officer</i>	<i>07-260302</i>
<i>Finance Officer</i>	<i>07-260205</i>
<i>Head, Department of Civil &amp; Surveying</i>	<i>07-260305</i>
<i>Head, Department of Electrical</i>	<i>07-260285</i>
<i>Head, Department of Mechanical</i>	<i>07-260300</i>
<i>Head, Department of IT</i>	<i>07-260284</i>
<i>Head, Department of ECE</i>	<i>07-260285</i>
<i>Head, Department of Humanities &amp; Science</i>	<i>07-260255</i>
<i>Estate Manager</i>	<i>07-260161</i>
<i>Student Service Officer</i>	<i>07-260306</i>
<i>Controller of Examination</i>	<i>07-260307</i>
<i>Library</i>	<i>07-260308</i>



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