

# STATE OF TERTIARY EDUCATION IN BHUTAN 2019



Higher Education Planning Division Department of Adult and Higher Education Ministry of Education Royal Government of Bhutan Thimphu: Bhutan

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#### 1. Acronyms, Abbreviations and Definitions

#### 1.1 - Acronyms and Abbreviations

- 1. AAHS: Arura Academy of Health Sciences
- 2. APEMS: Assistance to privately enrolled medical students
- 3. BAC: Bhutan Accreditation Council
- 4. BHSEC: Bhutan Higher Secondary Education Certificate
- 5. BQF: Bhutan Qualification Framework
- 6. CLCS: College of Language and Culture Studies
- 7. CNR: College of Natural Resources
- 8. CST: College of Science and Technology
- 9. DAHE: Department of Adult and Higher Education
- 10. DPA: Department of Public Accounts
- 11. ECPF: Education Consultancy and Placement Firm
- 12. FNPH: Faculty of Nursing and Public Health
- 13. FPM: Faculty of Postgraduate in Medicine
- 14. FTM: Faculty of Traditional Medicine
- 15. GCBS: Gedu College of Business Studies
- 16. GCIT: Gyalpozhing College of Information Technology
- 17. GDP: Gross Domestic Product
- 18. GoI: Government of India
- 19. HEPD: Higher Education Planning Division
- 20. ICCR: Indian Council for Cultural Relations
- 21. JNEC: Jigme Namgyel Engineering College
- 22. JSWSL: Jigme Singye Wangchuck School of Law
- 23. KGUMSB: Khesar Gyelpo University of Medical Sciences of Bhutan

- 24. NRC: Norbuling Rigter College
- 25. PCE: Paro College of Education
- 26. QAAD: Quality Assurance and Accreditation Division
- 27. RCSC: Royal Civil Service Commission
- 28. RGoB: Royal Government of Bhutan
- 29. RIM: Royal Institute of Management
- 30. RTC: Royal Thimphu College
- 31. RUB: Royal University of Bhutan
- **32. SC:** Sherubtse College
- 33. SCE: Samtse College of Education
- 34. STEM: Science, Technology, Engineering and Mathematics
- 35. TEB: Tertiary Education Board
- 36. TEI: Tertiary Education Institution.
- 37. TESS: Tertiary Education Statistics System
- 38. YCC: Yonphula Centenary College
- 39. YDF: Youth Development Fund
- 40. YWEO: Youth Welfare Education Office

#### 1.2 Definitions

- 1. GER: Gross Enrolment Ratio in tertiary education. The total enrolment in tertiary education regardless of age, expressed as a percentage of the total population of 19-23 years.
- 2. GPI: Gender Parity Index is the ratio of female to male enrolled in tertiary education institutions.
- 3. Youth unemployment rate is defined as the percentage of unemployed persons in the age group 15-24 years to the labour force (also known as economically active population) in the same age group.

#### 2. Introduction

A quality tertiary education is essential to develop human capital which is one of the important factors for the socio economic development of a nation. Given the current pace of development and technology advancement in the country, there is a need for dynamic workforce steeped in knowledge and skills by making higher education relevant. Therefore, a high priority is accorded in enhancing access to equitable and quality tertiary education in Bhutan.

His Majesty the King in his Royal address during the 112<sup>th</sup> National Day reminded us about the emerging technology advancements in fields of artificial intelligence, robotics, and the internet of things, big data, block chain, digital currencies, digital wallets, digital banking and quantum computing. This advancement has potential to raise global income levels and improve the quality of life for people around the world. In an era where the economic success is measured by technological advancement, it is important for tertiary education system to bring necessary domestic reforms and build international partnerships.

Realizing the significance of tertiary education, understanding the current state of tertiary education is of paramount importance. The state of tertiary education document is intended to provide information on the evolution and growth of education, and entire statistics of tertiary education system of the country. This document further provides an easy access to quality data on tertiary education for further researches and development in the field of higher education in the country.

### 3. Background of education system

Since the advent of Buddhism in the 8th century, monastic schools played an important role in the lives of the people and it continues even today. The modern form of education was introduced in Bhutan with the establishment of the first school in 1913 and more schools were opened in the 1950s. It has been promoted and expanded since the first Five Year Plan in 1961 to address the emerging educational needs, and develop human resources required for the socio-economic development of the country.

Sherubtse Junior College was upgraded to undergraduate degree college in 1983 followed by other tertiary education institutes. Prior to 2003, all tertiary education institutions (TEIs) were governed by the relevant Ministries and the degrees were awarded by the institutions themselves. In order to regulate and institute a sound tertiary education system, the Royal University of Bhutan (RUB) was established based on the federated college model in June, 2003. With the establishment of the RUB, all tertiary education institutions, which were previously governed by the relevant ministries and agencies, were placed under the University and restructured both in terms of nomenclature and programme. Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) was established in 2015.

Currently, the tertiary education sector consists of:

- ✓ Royal University of Bhutan with 10 constituent and 2 affiliated colleges.
- ✓ Khesar Gyalpo University of Medical Sciences of Bhutan with 3 distinct faculties constituting 3 individual and 1 affiliated college.
- ✓ Royal Institute of Management (Autonomous)
- ✓ Jigme Singye Wangchuck School of Law (Autonomous)

#### 4. Governance of tertiary education

The Department of Adult and Higher Education (DAHE), Ministry of Education (MoE) has an important mandate of ensuring sound tertiary education system in the country by serving as Secretariat to the Tertiary Education Board (TEB), Bhutan Accreditation Council (BAC) and Registrar for tertiary education. TEB is the highest executive decision making body appointed through an Executive Order with all matters relating to tertiary education in the country. This is in synchronization with the Tertiary Education Policy (TEP) of the Kingdom of Bhutan 2010 that envisages TEB to oversee and provide guidance and direction to TEIs. Such an approach will help to enhance effectiveness and efficiency in supporting the growth of tertiary education system through planning and funding.

BAC is a national autonomous body having overall authority on accreditation, quality assurance, and interpreting and recognizing qualification. It provides common framework for accreditations for all TEIs within Bhutan to ensure that the required standards are met.

The Registrar for tertiary education is an overall nodal position at a policy decision- making level to oversee and facilitate the functioning and communication thereof of the Board, the Council and the Tertiary Education Institutions.

# 5. Transition from HSS to TEIs and Unemployment

Table 5.1. Key Tertiary Education Indicators and its status 2019

S/No	Indicators	Status
1	Gross Enrolment Ratio (GER) at tertiary level within Bhutan (19-23 years old) *Denominator used 70207 from Population & Housing Census of Bhutan 2017, National Statistics Bureau.	17.52
2	Gross Enrolment Ratio at tertiary level within & outside Bhutan (19-23 years old)	23.11
3	Percentage of tertiary students studying abroad	24.22
4	Percentage of self- funding students within Bhutan	26.15
5	Percentage of self- funding within and outside Bhutan	35.67
6	Percentage of self- funding students in public TEIs within Bhutan	17.33
7	Gender Parity Index in tertiary education within Bhutan	0.95
8	Gender Parity Index in tertiary education within and outside Bhutan	0.94
9	Percentage of students studying in private TEIs within Bhutan	13.09
10	Percentage of students enrolled in STEM programmes within Bhutan	36.46
11	Percentage of female students enrolled in STEM programmes within Bhutan	30.99
12	Percentage of students enrolled in STEM programmes within and outside Bhutan	38.05
13	Percentage of students studying through self-funding in RUB	17.71

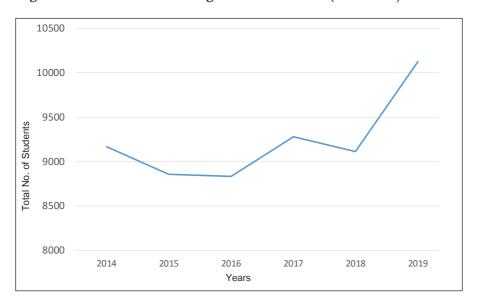
Table 5.2. Number of students who graduated BHSEC (2014-2019)

Year	Male	Female	Total	No. of students passed
2014	5300	5952	10252	9163
2015	4979	4972	9951	8855
2016	5162	5248	10410	8830

2017	5247	5030	10145	9280
2018	5292	5354	10,646	9115
2019	5618	5443	11061	10126

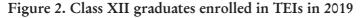
(Source: BCSEA as of January, 2020)

Figure 1. Number of student graduated BHSEC (2014-2019)



The existing statistics show the total number of students who graduated BHSEC between 2014 and 2018 fluctuated; however, there has been sharp rise in the number of BHSEC graduates in 2019.

Table 5.2 shows that the gender parity index was relatively narrow in the Higher Secondary Schools despite the fluctuations.



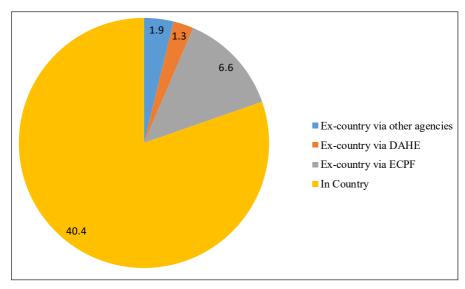


Figure 2 shows the percentage of class XII graduates enrolled in tertiary education though different agencies. About 50.2 % of class XII graduates were enrolled in tertiary education in 2019. Around 40% of Class XII graduates were absorbed in TEIs within country and remaining about 10 % of the students pursued their studies either on scholarship or on self-funding.

Table 5.3. Unemployment rate by level of education and gender, 2018

Level of Education	Male	Female	Total	Rate (%)
None	139	665	804	0.5
Primary	187	223	410	1.2
Lower Secondary	335	506	841	5.2
Middle Secondary	976	1527	2503	7.7
Higher Secondary	1483	1482	2965	11.2

Bachelor Degree	1367	1351	2719	12.7
Master degree and above	21	69	90	2.8
Religious Professionals	0	25	25	0.4
NFE	0	31	31	0.2
Don't know	27	0	27	12.8
Total	4508	5879	10414	3.4

(Source: Labour Force Survey - Annual Report 2018)

The Table 5.3 illustrates that the highest unemployment rate is among persons with Bachelor Degree (12.7%) followed by Higher Secondary (11.2%). The table also shows female unemployment rate is higher than male.

## 6. Statistics of Tertiary Education (within Bhutan)

Table 6.1. Year of establishment and location of TEIs

SI No	Name	Year of	Location
Royal University of Bhutan		Establishment	Location
1	College of Language and Culture Studies	1961	Taktse, Trongsa
2	College of Natural Resources	1992	Lobesa, Punakha
3	College of Science and Technology	2001	Rinchending,Chukha
4	Gedu College of Business Studies	2008	Gedu, Chukha
5	Gyalpozhing College of Information Technology	2017	Gyalpozhing, Mongar
6	Jigme Namgyel Engineering College	1972	Dewathang, Samdrup Jongkhar
7	Paro College of Education	1975	Paro

8	Samtse College of Education	1968	Samtse
9	Sherubtse College	1968	Kanglung, Trashigang
10	Yonphula Centenary College	2017	Yonphula, Trashigang
Khesar Gyalpo University of Medical Sciences of Bhutan		Year of Establishment	Location
1	Faculty of Nursing and Public Health	1974	Thimphu
2	Faculty of Postgraduate in Medicine	2014	Thimphu
3	Faculty of Traditional Medicine	1967	Kawang Jangsa, Thimphu
Autonomous Institutes		Year of	
Autono	mous Institutes	Establishment	Location
Autono 1	Jigme Singye Wangchuck School of Law		Location Pangbisa, Paro
	Jigme Singye Wangchuck School of	Establishment	
1 2	Jigme Singye Wangchuck School of Law	Establishment 2017	Pangbisa, Paro
1 2	Jigme Singye Wangchuck School of Law  Royal Institute of Management	2017 1986 Year of	Pangbisa, Paro Simtokha, Thimphu
1 2 Private	Jigme Singye Wangchuck School of Law  Royal Institute of Management  Institutes	2017 1986 Year of Establishment	Pangbisa, Paro Simtokha, Thimphu  Location Allay, Phuntsholing,

Table 6.2. Enrolment of students as per programmes offered by TEIs

Tertiary Education Institutes	Programme	Male	Female	Total
	Bachelor of Arts in Bhutanese and Himalayan Studies	189	250	439
	Bachelor of Arts in Language and Culture	18	4	22
College of Language	Bachelor of Arts in Language and Literature (BLL)	213	325	538
and Culture Studies	Diploma in Language and Communication Skills	23	33	56
	Honours of Arts in Language and Literature	7	3	10
	Masters in Dzongkha and Choekey	41	11	52
	B.Sc Agriculture (Diploma Nested)	43	87	130
	B.Sc Animal Science (Diploma Nested)	57	71	128
	B.Sc Environment & Climate Studies	55	48	103
	B.Sc Food Science & Technology (Diploma Nested)	51	65	116
College of Natural Resources	B.Sc Forestry (Diploma Nested)	93	63	156
	B.Sc Sustainable Development	99	183	282
	BSc Organic Agriculture	15	20	35
	M.Sc in Natural Resources Management	4	2	6
	Master's in Development Practice	5	8	13

	Bachelor of Architecture	61	51	112
	Bachelor of Engineering in Civil Engineering	280	96	376
	Bachelor of Engineering in Civil Engineering (In-service)	15	3	18
	Bachelor of Engineering in Electrical Engineering	122	50	172
	Bachelor of Engineering in Electrical Engineering (In-service)	5	2	7
	Bachelor of Engineering in Electronics and Communication Engineering	86	22	108
College of Science and Technology	Bachelor of Engineering in Electronics and Communication Engineering (In-service)	0	1	1
	Bachelor of Engineering in Engineering Geology	22	4	26
	Bachelor of Engineering in Information Technology	105	41	146
	Bachelor of Engineering in Information Technology (In-service)	1	0	1
	Bachelor of Engineering in Instrumentation and Control Engineering	17	7	24
	Master of Engineering in Renewable Energy	3	0	3
	B.Sc. in Clinical Counseling	11	13	24
	B.Sc. in Community Health	25	33	58
Faculty of Nursing and Public Health	Diploma in Dental Hygiene	6	6	12
	Diploma in Dental Technician	6	4	10
	Diploma in Emergency Medical Responder	33	22	55

	T		T .	
	Foundation	46	44	90
	Diploma in Medical Laboratory Technology	19	7	26
	B.Sc. in Nursing and Midwifery	5	6	11
Faculty of Nursing and	Diploma in Nursing and Midwifery (GNM)	64	80	144
Public Health	Diploma in Pharmacy	13	9	22
	Diploma in Physiotherapy	7	5	12
	Diploma in Public Health	2	2	4
	Diploma in Radiography and Medical Imaging	13	5	18
	Doctor of Medicine in Anesthesiology	4	2	6
	Doctor of Medicine in Emergency Medicine	3	1	4
	Doctor of Medicine in General Practice	1	2	3
	Doctor of Medicine in Medicine	4	4	8
	Doctor of Medicine in Obstetrics and Gynecology	1	5	6
Faculty of Postgraduate Medicine	Doctor of Medicine in Ophthalmology	0	2	2
ivieuicine	Doctor of Medicine in Orthopedics	4	0	4
	Doctor of Medicine in Otorhinolaryngology-Head and Neck Surgery	1	0	1
	Doctor of Medicine in Pediatrics	3	3	6
	MD Psychiatry	1	1	2
	MD Surgery	6	1	7

	Bachelor in Traditional Medicine	26	11	37
Faculty of Traditional Medicine	Diploma in Traditional Medicine	17	21	38
	Masters in Traditional Medicine	2	2	4
	Bachelor of Business Administration	243	168	411
Gedu College of Business Studies	Bachelor of Commerce	645	551	1196
	Master of Business Administration	13	4	17
	Bachelor of Computer Applications	72	86	158
Gyalpozhing College of Information	Bachelor of Science in Computer Science	28	13	41
Technology	Bachelor of Science in Information Technology	43	23	66
	Bachelor in Engineering in Mechanical Engineering	17	6	23
	Bachelor in Engineering in Power Engineering	73	16	89
	Bachelor in Engineering in Surveying and Geo-informatics	20	5	25
	Diploma in Civil Engineering	181	83	264
Jigme Namgyel Engineering College	Diploma in Computer System and Network	and 37 29		66
	Diploma in Electronics and Communication Engineering	30	14	44
	Diploma in Materials and Procurement Management	38	25	63
	Diploma in Mechanical Engineering	57	9	66
	Diploma in Surveying	35	19	54
Jigme Singye Wangchuck School of Law	LL.B./PGDNL	17	26	43

	BA in Dzongkha & English - 2019	6	28	34
	BA in Political Science & Sociology	21	17	38
Norbuling Rigter College	Bachelor of Business Administration	31	18	39
	Bachelor of Commerce	59	61	120
	Common Foundation	57	47	104
	B.Ed Dzongkha	120	109	229
	B.Ed Primary	191	415	606
	B.Ed Primary ( DE )	154	133	287
	B.Ed Secondary	14	10	24
Paro College of	Diploma in ECCD	5	114	119
Education	Diploma in Physical Education & Sports Coaching	34	10	44
	M.Ed in Dzongkha	64	13	77
	M.Ed in Educational Leadership & Management	62	5	67
	PGDE in Dzongkha	58	47	105
	PGDE in Dzongkha (DE)	31	0	31
Arura Academy of Health Sciences	Arura Academy of Health sciences	18	54	72

	Diploma in Financial Management	24	30	54
	Master of Business Administration(MBA)	26	16	42
Royal Institute of Management	Post Graduate Diploma in Financial Management (PGDFM)	13	20	33
	Post Graduate Diploma in National Law (PGDNL)	13	21	34
	Post Graduate Diploma in Public Administration (PGDPA)	17	23	40
	B. Com Accounting	11	8	19
	B.Com Finance	72	78	150
	BA in Anthropology	21	37	58
	BA in Development Economics	31	51	82
Royal Thimphu College	BA in English Studies	37	69	106
	BA in History and Dzongkha	36	41	77
	BA in Mass Communication	20	35	55
	BA in Political Science and Sociology	50	59	109
	Bachelor of Computer Application	or of Computer Application 8 1		9
	BBA General Management	BBA General Management 41 25		66
	BBA Marketing	11	8	19
	BSc. Environmental Management	60	66	126
	BSc. Nursing and Midwifery	6	57	63
	Business Studies	124	140	264

	Bachelor of Arts in Social Work	11	24	35
	Bachelor of Education (B. Ed) Primary	10	31	41
	Bachelor of Education (B. Ed) Secondary	221	268	489
	Diploma in Library and Information Management (DLIM)	5	10	15
Samtse College of	Master of Arts in Contemplative Counseling and Psychology (MACCP)	17	10	27
Education	Master of Education(M. Ed) in Science and Maths	43	3	46
	Post Graduate Certificate in Higher Education (PGCHE)	43	20	63
	Post Graduate Diploma in Contemplative Counseling and Psychology (PGDCCP)	36	31	67
	Post Graduate Diploma in Education (PGDE)	62	57	119
	Post Graduate Diploma in Higher Education (PGDHE)	8	3	11
	BA in Dzongkha & English	49	106	155
	BA in Dzongkha & Media Studies	24	36	60
	BA in Economics	21	20	41
	BA in Economics & Geography	49	52	101
Sherubtse College	BA in Economics & Population Studies	1	1	2
	BA in English	12	29	41
	BA in English & Media Studies	19	36	55
	BA in History	24	17	41
	BA in History & Dzongkha	60	33	93

	BA in Media Studies	14	30	44
	BA in Political Science & Sociology	76	90	166
	BA in Population & Development Studies	41	75	116
	BSc in Botany	1	3	4
	BSc in Chemistry	51	29	80
	BSc in Computer Science	39	24	63
	BSc in Environmental Science	74	94	168
Sherubtse College	BSc in Geography	20	26	46
	BSc in Life Science	70	71	141
	BSc in Mathematics	61	23	84
	BSc in Maths & Chemistry	5	3	8
	BSc in Maths & Physics	5	5	10
	BSc in Phyiscs	45	21	66
	BSc in Physics & Chemistry	8	0	8
	Postgraduate Diploma In English	17	8	25
Yonphula Centenary College	MA in English	33	11	44
Grand Total				12297

Table 6.3. Tertiary students by level and year

Diploma-1st Year         282         237         519         65         59         124         1         2         3         348         Female	Year	RGoB	RGoB - funding		Self - f	Self - funding		Other	Other – funding		Total		
1st Year         282         237         519         65         59         124         1         2         3         348         298           2nd Year         263         212         475         57         38         95         0         0         320         250           3nd Year         75         104         179         5         12         17         5         10         15         85         126           -1st Year         620         553         1173         127         109         236         6         12         18         75         164           -2nd Year         862         875         1747         473         568         1041         30         41         71         136         1494           -2nd Year         1005         1043         2048         460         515         975         30         36         66         1495         1494           -3nd Year         12         6         18         2         1         3         0         0         14         7         149           -5th Year         11         3365         3579         6654         129         15 <t< th=""><th></th><th>Male</th><th>Female</th><th>Total</th><th>Male</th><th>Female</th><th>Total</th><th>Male</th><th>Female</th><th>Total</th><th>Male</th><th>Female</th><th>Total</th></t<>		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ist Year         282         237         519         65         59         124         1         2         3         348         298           Ind Year         263         212         475         57         38         95         0         0         0         320         250           Ind Year         75         104         179         5         12         17         5         10         15         30         25	Diploma												
Ind Year         75         475         57         38         95         0         0         0         320         250           Srd Year         75         104         179         5         12         17         5         10         15         85         126           Srd Year         620         553         1173         127         109         236         6         12         18         75         126          Ist Year         862         875         1747         473         568         1041         30         41         71         1365         1494          Stnd Year         1005         1043         2048         460         515         975         30         36         66         1495         1594          Stnd Year         105         1043         2048         460         515         975         30         36         66         1495         1594          Sth Year         12         6         18         2         142         1         1         2         451         4924           Honours-1st Year         113         49         162         13         10         0 <td< td=""><td>Diploma-1st Year</td><td>282</td><td>237</td><td>519</td><td>65</td><td>29</td><td>124</td><td>_</td><td>2</td><td>က</td><td>348</td><td>298</td><td>646</td></td<>	Diploma-1st Year	282	237	519	65	29	124	_	2	က	348	298	646
Ind Year         75         104         179         5         12         17         5         10         15         85         126         12         17         5         10         15         16         15         85         126         12         17         18         75         16         15         16         15         16         15         16         15         16         15         16         16         15         16         16         16         16         17         18         75         149         17         149<	Diploma-2nd Year	263	212	475	22	38	92	0	0	0	320	250	220
-1st Year 862 875 1747 473 568 1041 30 41 71 1365 1494 -2nd Year 1005 1043 2048 460 515 975 30 36 66 1495 1594 -3nd Year 1099 1028 2127 297 357 654 40 37 77 1436 1422 -4th Year 387 327 714 63 79 142 1 1 2 451 407 -5th Year 113 49 162 13 2 157 2 15	Diploma-3rd Year	75	104	179	5	12	17	5	10	15	85	126	211
862         875         1747         473         568         1041         30         41         71         1365         1494           1005         1043         2048         460         515         975         30         36         66         1495         1594           1099         1028         2127         297         357         654         40         37         77         1436         1422           12         6         18         2         1         3         0         0         14         7           3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         14         7           18         1         19         7         3         10         0         0         0         25         4	Sub Total	620	553	1173	127	109	236	9	12	18	753	674	1427
862         875         1747         473         568         1041         30         41         71         1365         1494           1005         1043         2048         460         515         975         30         36         66         1495         1594           1099         1028         2127         297         357         654         40         37         77         1436         1422           12         6         18         2         1         3         0         0         14         407           12         6         18         2         1         3         0         0         14         7           113         49         162         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         0         26         4           13         5         18         1         1         2         0         0         0         25         4	Bachelor												
1005         1043         2048         460         515         975         30         36         66         1495         1594           1099         1028         2127         297         357         654         40         37         77         1436         1422           12         6         18         2         1         3         0         0         14         7           3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4	Bachelors-1st Year	862	875	1747	473	268	1041	30	41	71	1365	1494	2859
1099         1028         2127         297         357         654         40         37         77         1436         1422           12         6         18         2         1         3         0         0         0         14         7           3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         25         4           13         5         18         1         1         2         0         0         14         6         4	Bachelors-2nd Year	1005	1043	2048	460	515	975	30	36	99	1495	1594	3089
387         327         714         63         79         142         1         1         2         451         407           12         6         18         2         1         3         0         0         0         14         7           3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         2         0         0         14         6	Bachelors-3rd Year	1099	1028	2127	297	357	654	40	37	77	1436	1422	2858
12         6         18         2         1         3         0         0         14         7           3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         2         0         0         14         6	Bachelors-4th Year	387	327	714	63	19	142	_	_	2	451	407	858
3365         3279         6654         1295         1520         2815         101         115         216         4761         4924           113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         2         0         0         14         6	Bachelors-5th Year	12	9	18	2	_	က	0	0	0	41	7	21
113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         2         0         0         14         6	Sub Total	3365	3279	6654	1295	1520	2815	101	115	216	4761	4924	9685
113         49         162         13         2         15         0         0         0         126         51           18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         1         2         0         0         14         6	Bachelor Honours												
18         1         19         7         3         10         0         0         0         25         4           13         5         18         1         1         2         0         0         0         14         6	Bachelor Honours-1st Year	113	49	162	13	2	15	0	0	0	126	21	177
13 5 <b>18</b> 1 1 2 0 0 <b>0</b> 14 6	Bachelor Honours-2nd Year	18	_	19	7	က	10	0	0	0	25	4	29
	Bachelor Honours-3rd Year	13	2	18	_	-	7	0	0	0	41	9	20

Bachelor Honours-4th Year	18	7	25	က	0	က	0	0	0	21	7	28
Sub Total	162	62	224	24	9	30	0	0	0	186	89	254
Doctorate												
Doctorate-1st year	10	10	20	0	0	0	0	0	0	10	10	20
Doctorate-2nd Year	7	5	12	0	0	0	0	0	0	7	2	12
Doctorate-3rd Year	7	4	11	0	0	0	0	0	0	7	4	7
Doctorate-4th Year	4	2	9	0	0	0	0	0	0	4	2	9
Sub Total	28	21	49	0	0	0	0	0	0	28	21	49
Master												
Masters-1st Year	88	22	110	18	13	31	51	7	28	157	42	199
Masters-2nd Year	62	21	100	2	0	2	12	9	18	93	27	120
Masters-3rd Year	42	9	09	0	0	0	0	0	0	54	9	09
Sub Total	221	49	270	20	13	33	63	13	92	304	75	379
Post Graduate Certificate												
Post Graduate Certificate	30	40	20	0	3	က	43	20	63	73	63	136
Post Graduate Diploma												
Post Graduate Diploma	66	88	188	54	45	66	55	25	80	208	159	367
Grand Total	4525	4103	8628	1520	1696	3216	268	185	453	6313	5984	12297

(Source: www.dahe.gov.bt/tess, retrieved in December 2019)

Table. 6.4. Tertiary students by field of study and gender

S/No.	Field of Study	Male	Female	Total
1	Education	905	1173	2078
2	Arts and Humanities	772	850	1622
3	Engineering and Construction	1175	472	1647
4	Manufacturing	51	65	116
5	Business and Administration	1541	1326	2867
6	Law	30	47	77
7	Health and Allied Sciences	347	402	749
8	Agriculture, Forestry, Fisheries and Veterinary	208	241	449
9	Social Science	462	593	1055
10	Journalism and Information	39	75	114
11	Information and Communication Technology	190	147	337
12	Natural Sciences	422	475	897
13	Mathematics and Statistics	171	118	289
	Total			12297

(Source: www.dahe.gov.bt/tess, retrieved in December 2019)

It is observed that the maximum number of students is enrolled in Business and Administration field with 2867 students and the least number is in law with 77 students. Almost in all the fields, female students outnumbered the male. The programmes for each field of study can be obtained from Annexure.

Table 6.5. Teaching faculty by gender in TEIs

No.	Name of Institution/ College	Type of Institution	Male	Female	Total
1	College of Language & Culture Studies	Public	49	11	60
2	College of Natural Resources	Public	38	15	53
3	College of Science & Technology	Public	50	23	73
4	Gedu College of Business Studies	Public	56	14	70
5	Gyalpozhing College of Information & Technology	Public	8	4	12
6	Jigme Namgyel Engineering College	Public	53	9	62
7	Paro College of Education	Public	50	21	71
8	Samtse College of Education	Public	35	14	49
9	Sherutse College	Public	71	23	94
10	Yonphula Centenary College	Public	4	1	5
11	Faculty of Nursing & Public Health	Public	13	19	32
12	Faculty of Postgraduate Medicine	Public	6	3	9
13	Faculty of Traditional Medicine	Public	7	3	10
14	Jigme Singye Wangchuck School of Law	Autonomous Public	9	6	15
15	Royal Institute of Management	Autonomous Public	21	9	30
16	Royal Thimphu College	Private	49	38	87
17	Arura Academy of Health Sciences	Private	3	6	9
18	Norbuling Rigter Collge	Private	12	13	25
	Тс	otal	534	232	766

The highest number of teaching faculty is in Sherubtse College with 94 faculty members and second highest is observed in Royal Thimphu College with a total of 87 faculty members. Almost in all the TEIs, male faculty members outnumbered the female.

Table 6.6. Tuition fees (Nu.) in Universities and TEIs

University/ TEIs	Programme	2015	2016	2017	2018	2019
RUB	Arts & Humanities	69710/-	68344/-	68344/-	68344/-	68344/-
	Science	86360/-	84668/-	84668/-	84668/-	84668/-
RTC	General Courses	1144000/-	119400/-	122900/-	127000/-	127000/-
	BSc. Nursing and Midwifery					145400
FNPH (KGUMSB)	All Courses			93000/-	93000/-	93000/-
FoTM (KGUMSB)	Bachelors			108000/-	108000/-	108000/-
	Masters			180000/-	180000/-	180000/-
AAHS	Diploma			75,000/-	75,000/-	80,000/-
NRC	Bachelors			83,000/-	83,000/-	84,852/-

(Source: www.dahe.gov.bt/tess, retrieved on 20th December 2019)

The students who wish to study as self-funding students in various TEIs in Bhutan need to pay tuition fees. The fees structure for the five consecutive years in various TEIs is shown in the Table 6.6.

#### 7. Tertiary students on scholarships (outside Bhutan)

Every year, the Royal Government of Bhutan provides scholarships for class XII graduates to pursue various academic degrees. Due to limited slots, the selection of the students is done on academic merit basis. Several other agencies such as Royal Civil Service Commission, Tarayana Foundation, Loden Foundation, Youth Development Fund and Youth Welfare Education Office under His Majesty's Secretariat also provide scholarship opportunities.

Table.7.1. Tertiary students currently studying in various countries on scholarship administered by DAHE

S/No	Source of Funding	Australia	Bangladesh	nstuda	Canada	Cuba	sibnl	sisyslaM	Sri Lanka	bnslisdT	Asu	mobgniX bəjinU	Gender	L	
													Male	Female	Total
-	109	0	0	0	0	0	420	0	2	0	0	0	233	189	422
2	RGOB-Third Countries	6	10	0	9	0	0	18	84	6	22	5	94	69	163
3	RGoB-APEMS	0	25	0	0	0	2	0	75	0	0	0	29	73	102
4	RGoB-India	0	0	0	0	0	က	0	0	0	0	0	3	0	က
5	RGoB-RTC	0	0	117	0	0	0	0	0	0	0	0	47	20	117
9	RGoB-QECS	0	0	0	0	0	54	0	0	0	0	0	32	22	54
7	ICCR	0	0	0	0	0	92	0	0	0	0	0	61	15	92
8	Cuban Govt.	0	0	0	0	_	0	0	0	0	0	0	-	0	_
	Total	6	35	117	9	1	555	18	161	6	22	2	200	438	938

(Source: SSSD, DAHE, as of December 2019)

The Table. 7.1 shows that there were 938 undergraduate students pursuing various courses in Bhutan and in other countries on scholarship. This also includes those undergraduate students with partial scholarships known as Assistance to Privately Enrolled Medical Students (APEMS) scholarships. The majority of these students are pursuing their studies in India.

Table. 7.2. Tertiary students currently studying in various countries through scholarships administered by different agencies

S/No	Country	Female	Male	Total
1	Armenia	1	1	2
2	Australia	38	52	90
3	Bangladesh	40	9	49
4	Canada	0	3	3
5	Cuba	0	1	1
6	France	1	1	2
7	Germany	1	3	4
8	Hong Kong	1	0	1
9	India	28	76	104
10	Indonesia	2	0	2
11	Italy	1	0	1
12	Japan	4	18	22
13	Korea	0	1	1
14	Malaysia	0	1	1
15	Nepal	0	1	1
16	Netherland	4	6	10
17	New Zealand	1	1	2
18	Norway	1	0	1
19	Philippines	1	2	3
20	Singapore	1	4	5
21	Spain	0	1	1
22	Sri Lanka	9	7	16
23	Switzerland	2	0	2

24	Thailand	87	104	191
25	United Kingdom	3	8	11
26	United States	8	4	12
27	Others	0	1	1

(Source: Loden Foundation, YDF, Tarayana Foundation, Youth Welfare Education Office as of December 2019)

Through the scholarship administered by different agencies, the maximum number of students was placed in Thailand and India. The scholarships are based on economic background and academic performance of the students. Table 7.2 shows students studying in various countries.

Table 7.3. Scholarsip students by field of study and gender

S/No	Field of Study	Female	Male	Total
1	Education	37	44	81
2	Arts and Humanities	44	55	99
3	Engineering and Construction	49	171	220
4	Manufacturing	8	14	22
5	Business and Administration	71	50	121
6	Law	14	7	21
7	Health and Allied Sciences	232	194	426
8	Agriculture, Forestry, Fisheries and Veterinary		48	64
9	9 Services		13	49
10	Social Science	34	42	76
11	Journalism and Information	2	6	8
12	Information and Communication Technology	10	15	25
13	Natural Sciences	36	58	94
14	Mathematics and Statistics	12	40	52
	Total	601	757	1358

(Source: SSSD, DAHE, Loden, YWEO, Taryana and YDF as of December 2019)

The Health and Allied Sciences has the highest number of students with 426 students and least in journalism and information with 8 students. Table 7.3 shows the scholarship students by their field of study and gender.

#### 8. Self-funding students placed by ECPFs

A significant number of students also study abroad through self-funding. The number of self-funding students are based on the data collected from ECPFs. There are 2572 students pursuing various courses through self funding with majority of them in Australia followed by India as shown in Table 8.1. However, the students enrolled in TEIs outside the country by their own could not be captured.

Table 8.1. Self-funding students by country and gender

SI. No	Country	Female	Male	Total
1	India	494	637	1,131
2	Australia	710	589	1,299
3	Bangladesh	0	1	1
4	Canada	15	19	34
5	Malaysia	7	16	23
6	Singapore	4	8	12
7	Switzerland	0	1	1
8	Thailand	16	11	27
9	USA	16	7	23
10	Others	15	6	21
	Total	1277	1295	2,572

Table 8.2. Self-funding students by field of study and gender

S/No	Field of Study	Female	Male	Total
1	Education	101	61	162
2	Arts and Humanities	53	50	103
3	Engineering and Construction	194	322	516
4	Manufacturing	3	3	6
5	Business and Administration	371	356	727
6	Law	21	28	49
7	Health and Allied Sciences	152	94	246
8	Agriculture, Forestry, Fisheries and Veterinary	6	18	24
9	Services	236	204	440
10	Social Science	22	15	37
11	Journalism and Information	41	18	59
12	Information and Communication Technology	41	83	124
13	Natural Sciences	34	40	74
14	Mathematics and Statistics	2	3	5
	Total	1277	1295	2572

(Source: ECPF as of December 2019)

Table 8.2 shows the number of students availing tertiary education in the TEIs outside the country through self-funding by the field of study. The number of students enrolled in Business and Administration is the highest with 727 followed by Engineering and Construction with 516 students, and Mathematics and Statistics being the least with only 5 students.

Table 8.3. Total tertiary students studying abroad by level and year

Level		Scholarship	rship		Self-Funding	ding		Both		
	Year	Σ	ш	Total	Σ	ш	Total	N	ш	Total
	1 <sup>st</sup> year	2	2	4	55	83	138	22	85	142
2	2 <sup>nd</sup> year	5	2	7	29	16	45	34	18	52
	3 <sup>rd</sup> year	8	9	6	28	17	45	31	23	54
	Total	10	10	20	112	116	228	122	126	248
	1 <sup>st</sup> year	73	86	171	242	226	468	315	324	639
	2 <sup>nd</sup> year	26	111	208	222	171	393	319	282	601
	3 <sup>rd</sup> year	88	94	182	222	160	382	310	254	564
Bachelor	4 <sup>th</sup> year	116	80	196	0	61	61	116	141	257
	5 <sup>th</sup> year	62	45	124	16	9	22	98	51	146
	6 <sup>th</sup> year	61	54	115	0	0	0	61	54	115
	Total	514	482	966	702	624	1326	1216	1106	2322

	1st year	80	2	10	0	0	0	8	2	10
Post Graduate Certificate/ Diploma	2 <sup>nd</sup> year	4	3	2	0	0	0	4	3	7
	Total	12	5	11	0	0	0	12	5	17
	1st year	100	52	152	300	360	099	400	412	812
	2 <sup>nd</sup> year	84	41	125	170	171	341	254	212	466
Master	3 <sup>rd</sup> year	8	7	15	9	3	6	14	10	24
	4 <sup>th</sup> year	2	0	2	0	0	0	2	0	2
	Total	194	100	294	476	534	1010	670	634	1304
	1st year	7	2	6	3	3	9	10	5	15
	2 <sup>nd</sup> year	10	1	11	2	0	2	12	1	13
Doctorate	3 <sup>rd</sup> year	4	2	6	0	0	0	4	2	9
	4 <sup>th</sup> year	3	2	5	0	0	0	3	2	5
	Total	24	7	31	5	က	80	29	10	39
	Overall Total	754	604	1358	1295	1277	2572	2049	1881	3930

# 9. Total students enrolled within and outside Bhutan in 2019

Table 9.1. Students enrolled in TEIs within Bhutan by different funding source in 2019

Name of Institutes	RGoB	Self-funding	Other-funding	Total
College of Natural Resources	231	86	4	321
College of Science and Technology	209	69	3	281
Gedu College of Business Studies	356	172	15	543
College of Language and Culture Studies	300	31	0	331
Jigme Namgyel Engineering College	276	68	0	344
Paro College of Education	439	66	0	505
Samtse College of Education	115	37	198	350
Sherubtse College	407	143	0	550
Faculty of Nursing and Public Health	158	0	0	158
Faculty of Traditional Medicine	26	0	0	26
Royal Thimphu College	30	362	31	423
Royal Institute of Management	110	93	0	203
Faculty of Postgraduate Medicine	20	0	0	20
Arura Academy of Health Sciences	0	37	3	40
Yonphula College	14	0	0	14
Gyalpozhing College of Information Technology	107	0	0	107
Norbuling Rigter College	0	149	21	170
Jigme Singye Wangchuck School of Law	18	0	0	18
Grand Total	2816	1313	275	4404

(Source: www.dahe.gov.bt/tess, retrieved on 20th December 2019)

The total intake in 2019 was 4404 of which 1313 were self-financing students studying in various colleges in Bhutan. Sherubtse College enrolled the highest number of students in 2019 with 550 students.

Table 9.2. Students enrolled outside Bhutan administered by different agencies in 2019

Agencies	DAHE Scholarship	ECPFs	Loden Fondation	Tarayana foundation	YWEO	YDF	RCSC	Total
No. of Students	145	1,216	5	6	49	1	167	1589

# 10. Total students enrolled within and outside Bhutan, and in STEM courses

Every year around 50% of class XII graduates gets enrolled in various TEIs within and outside Bhutan. The cumulative figure of students currently studying in various TEIs within and outside Bhutan is represented in Table 10.1 and students undertaking STEM courses is represented in table 10.2

Table 10.1. Total number of students enrolled in tertiary education within and outside Bhutan

8	Name of	RGoB-funding	guipur		Self-funding	ding		Other-f	Other-funding		Total		
No	College	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
_	CLCS	466	929	1022	25	70	92	0	0	0	491	979	1117
2	CNR	322	430	752	92	115	207	8	2	10	422	247	696
3	CST	292	189	922	147	88	235	3	0	3	717	277	994
4	GCBS	654	462	1116	225	245	470	22	16	38	901	723	1624
2	GCIT	143	122	265	0	0	0	0	0	0	143	122	265
9	JNEC	378	163	541	110	43	153	0	0	0	488	206	694
7	PCE	654	814	1468	62	42	121	0	0	0	733	928	1589
8	SCE	245	298	543	48	91	139	163	89	231	456	457	913
6	sc	647	651	1298	139	181	320	0	0	0	786	832	1618
16	YCC	33	11	44	0	0	0	0	0	0	33	11	44
Sub - Total	Total	4109	3696	7805	865	875	1740	196	86	282	5170	4657	9827
10	FNPH	241	228	469	6	8	17	0	0	0	250	236	486
14	FoPM	28	21	49	0	0	0	0	0	0	28	21	49
11	FoTM	43	34	77	2	0	2	0	0	0	45	34	79
- qns	Sub - Total	312	283	595	11	8	19	0	0	0	323	291	614
18	JSWSL	17	26	43	0	0	0	0	0	0	17	26	43
13	RIM	54	56	110	39	54	93	0	0	0	93	110	203

- qns	Sub - Total	71	82	153	39	54	93	0	0	0	110	136	246
15	AAHS	0	0	0	17	52	69	-	2	က	18	54	72
17	NRC	_	_	2	149	148	297	14	22	36	164	171	335
12	RTC	32	41	73	439	559	866	22	75	132	528	675	1203
Sub - Total	Total	33	42	75	605	759	1364	72	66	171	710	900	1610
Grand T Bhutan)	<i>Grand Total (</i> within Bhutan)	4525	4103	8628	1520	1696	3216	268	185	453	6313	5984	12297
DAHE Admi Scholarship	DAHE Administered Scholarship	453	368	821	0	0	0	0	0	0	453	368	821
YWEC	YWEO Scholarship	0	0	0	0	0	0	20	22	107	50	22	107
Loden Foun Scholarship	Loden Foundation Scholarship	0	0	0	0	0	0	14	12	26	14	12	26
RCSC Admi Scholarship	RCSC Administered Scholarship	0	0	0	0	0	0	227	110	337	227	110	337
Tarayana Fo Administere Scholarship	Tarayana Foundation Administered Scholarship	0	0	0	0	0	0	-	41	42	-	41	42
YDF Admini Scholarship	YDF Administered Sc <i>holarship</i>	0	0	0	0	0	0	12	13	25	12	13	25
ECPF		0	0	0	1295	1277	2572	0	0	0	1295	1277	2572
Grand Total (Excountry)	l Total untry)	453	368	821	1295	1277	2572	304	233	537	2052	1878	3930
Over	Over All Total	4978	4471	9449	2815	2973	5788	572	418	066	8365	7862	16227
ļ			4		- 6	I	,	(					

(Source: www.dahe.gov.bt/tess & SSSD, RCSC, ECPF, YDF, Tarayana, YWEO & Loden Foundation 2019)

The total number of students studying in various TEIs within the country for the academic year 2019 was 12,297 (6313 male and 5984 female) and the total number of students within and outside Bhutan was 16227 which includes scholarship and privately funded students (8339 male and 7888 female).

Table 10.2. Students enrolled in STEM subjects within and outside Bhutan

Within Bhuta	n		
In Country STEM	Female	Male	Total
Engineering and Construction	472	1175	1647
Health and Allied Sciences	402	347	749
Agriculture, Forestry, Fisheries and Veterinary	241	208	449
Information and Communication Technology	147	190	337
Natural Sciences	475	422	897
Mathematics and Statistics	118	171	289
Total	1855	2513	4368
Outside Bhut	an		
	Female	Male	Total
Engineering and Construction	288	557	847
Manufacturing	13	14	27
Health and Allied Science	232	198	433
Agriculture, Forestry	26	70	96
Information and Communication Technology	58	103	161
Natural Sciences	77	105	183
Mathematics and Statistics	15	44	59
Total	714	1092	1806

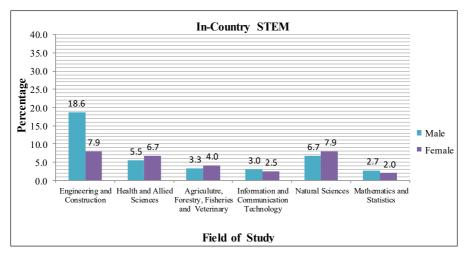


Figure 3. Within Bhutan

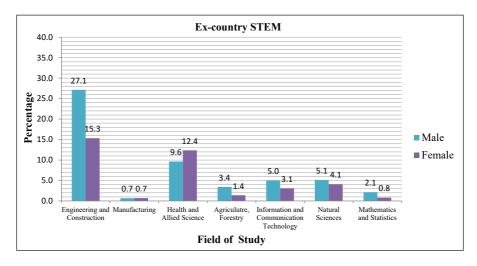


Figure 4. Outside Bhutan

The total number of students enrolled in STEM subjects within Bhutan is 4368 (2513 male and 1855 female) while, the total number of students enrolled in STEM subjects within and outside Bhutan is 6174 (3605 male and 2569 female). The maximum number of students is enrolled in Engineering and Construction.

Table. 10.3. Students enrolled in various TEIs over the last five consecutive years (within Bhutan)

Name of institute	2015	2016	2017	2018	2019
College of Language and Culture Studies	397	404	426	390	321
College of Natural Resources	183	213	310	281	281
College of Science and Technology	260	262	304	262	543
Gedu College of Business Studies	452	504	614	587	331
Gyalpozhing College of Information Technology		-	62	79	344
Jigme Namgyel Engineering College	416	385	458	350	505
Paro College of Education	253	265	227	479	350
Samtse College of Education	196	201	241	468	250
Sherubtse College	543	289	548	530	158
Yonphula Centenary College	-	-	32	30	26
Faculty of Nursing and Public Health (KGUMSB)	134	898	151	177	423
Faculty of Postgraduate Medicine (KGUMSB)	7	42	11	13	203
Faculty of Traditional Medicine (KGUMSB)	20	28	25	19	20
Jigme Singye Wangchuck School of Law	-	-	25	18	40
Royal Institute of Management	301	430	162	208	14
Norbuling Rigter College	1	-	91	92	107

Arura Academy of Health Sciences	-	53	14	17	170
Royal Thimphu College	208	392	388	430	18
Rigney College	-	-	12	-	-
Grand Total	3670	4161	4118	4430	4404

The yearly intake of students in TEIs remained almost constant at around 4000 for the last four consecutive years. There was increase of intake almost by 490 students in the year 2016 from 2015.

Table. 10.4. Students enrolled outside Bhutan by various agencies over the last three consecutive years

Year	DAHE	ECPFs	Loden Foundation	Tarayana foundation	YWEO	YDF	RCSC	Total
2019	145	1,216	5	9	49	<del>-</del>	167	1589
2018	155	082	4	24	23	13	140	1139
2017	161	268	-	15	12	7	184	648

# 11. Students enrolled under Student Loan Scheme

Table. 11.1. The total number of students enrolled under student loan scheme for tertiary education

	Overal IstoT	30	31	87	25	16	14	99	141	31	4	1	19	ဗ	20	488
otal	ш	18	9	34	14	7	00	30	84	10	3	-	12	2	6	238
G Total	Σ	12	25	53	1	6	9	36	22	22	1	0	7	1	1	251
tal	toT-du&	5	2	12	2	ဗ	2	10	10	7	0	0	4	8	0	09
2018	ш	က	0	7	1	0	1	1	6	2	0	0	4	2	0	30
20	Σ	2	2	2	1	က	1	6	1	5	0	0	0	1	0	30
lal	toT-du&	1	6	18	4	2	-	12	33	16			2	0	0	111
2017	ш	6	4	8	3	3	0	7	18	7			-	0	0	9
20	Σ	2	2	10	-	2	-	2	15	6			-	0	0	51
tal	toT-du&	6	6	28	9	2	4	17	22	8	4	-	13	0	0	123
2016	ш	4	0	9	2	2	3	6	14	1	3	1	7	0	0	52
20	Σ	5	6	22	4	0	_	8	8	7	1	0	9	0	0	71
lsto	oT-du&	5	7	23	10	4	2	19	09	0	0	0	0	0	4	147
2015	ш	2	-	11	5	0	2	11	32	0			0	0	7	71
20	Σ	က	9	12	2	4	က	∞	28	0	0		0	0	7	92
tal	toT-du&	0	4	9	က	2	2	∞	16	0	0	0	0	0	9	47
14	ш	0	-	2	က	2	2	2	11	0	0	0	0	0	2	25
2014	Σ	0	3	4	0	0	0	9	5	0	0	0	0	0	4	22
se	College	CNR	CST	GCBS	CLCS	PCE	SCE	SC	RTC	JNEC	HANH	FTM	RAHS	NRC	India	Total
	SI.No	-	2	က	4	5	9	7	80	6	10	11	12	13	14	T

(Source: HEPD, DAHE as of December 2019)

The student loan scheme for tertiary education was started in the year 2014. A total of 522 students were selected under the Student Loan Scheme for tertiary education until 2018. However, only 488 tertiary students actually availed loan with maximum students studying in RTC. Out of 488 students 236 students successfully completed their studies in July 2019.

## 12. Budget allocation for Tertiary Education

The tertiary education expenditure as a percentage of GDP in financial year 2018 -19 was 0.99 %. The total expenditure of Nu. 1630.07 million was spent on tertiary education against Nu. 164,627.92 million GDP in the 2018-2019 fiscal year. Table 12.1 shows the expenditure in various universities and institutes for the financial year 2018-2019.

Table. 12.1. Budget & Expenditure on Tertiary Education for the FY 2018-2019

Amanay	Budç	get	Total	Expen	diture	Total
Agency	Current	Capital	Total	Current	Capital	Total
RIM	46.54	25.149	71.689	43.644	19.684	63.328
JSWSL	43.124	139.859	182.983	28.565	87.360	115.925
RUB	715.828	300.300	1,016.128	706.409	193.039	899.448
KGUMSB	111.561	45.088	156.649	110.810	39.570	150.380
DAHE	17.307	395.162	412.469	16.659	384.330	400.989
Total	934.36	184.947	1839.918	906.087	723.983	1630.07
GDP						164, 627.92
Expenditure	as a percenta	ge of GDP				0.99

(Source: DPA, December 2019)

### 13. Accreditation status of TEIs

Accreditation is one of the most important tools used globally for quality assurance. There are two types of accreditation; institutional accreditation and programme accreditation. The BAC started with institutional accreditation, and depending on the need it may initiate programme accreditation in future, as deemed appropriate. Accreditation aims to assure educational quality and accountability, and encourages continuous quality enhancement. It entails a continuous process to help TEIs analyze its functions, mission, assess its own performance, review its planning procedure and identify ways to enhance it is educational effectiveness. Accreditation is mandatory for all the TEIs in Bhutan. The Council completed the first cycle of institutional accreditation in 2019.

Table, 13.1. Accreditation status of TEIs

S/ No	Institutions	Year of accreditation	Grade	Descriptor
1.	Gedu College of Business Studies	May, 2016	А	Very Good
2.	Royal Thimphu College	June, 2016	A+	Excellent
3.	Faculty of Nursing and Public Health	June, 2017	В	Good
4.	Faculty of Traditional Medicine	June, 2017	В	Good
5.	Paro College of Education	May, 2017	В	Good
6.	Samtse College of Education	May, 2017	А	Very Good
7.	College of Science and Technology	November, 2017	А	Very Good
8.	JigmeNamgyel Engineering College	November, 2017	А	Very Good
9.	Sherubtse College	November, 2017	А	Very Good

10.	College of Natural Resources	March, 2018	А	Very Good
11.	College of Language and Culture Studies	March, 2018	А	Very Good
12.	Arura Academy of Health Sciences	October, 2019	С	Satisfactory

(Source: Quality Assurance and Accreditation Division, the Secretariat to BAC 2019)

The validity of accreditation depends on the grade obtained during the accreditation as given in the following table:

Grade obtained	A+	Α	В	С	D
Validity	7 years	6 years	5 years	3 years	Not accredited

The Accreditation Manual 2014, is currently under review.

### 14. TVET Institutions

Table 14.1 shows the number of trainees in various TVET institutions in 2019. The number of female trainees was found to be almost half the number of male trainees. The percentage of female trainees enrolled in TVET as on 2019 was 29 percent.

Table 14.1. TVET trainees by Institution, course and gender

			2019				
SN	Enrollment	No of courses	Trades	Slots	Enrolled		
				announced	Male	Female	Total
		1	Carpentry NC II	20	12	6	18
	TTI Chumey,	2	Masonry NC II	30	18	12	30
1	Bumthang	3	Plumbing NC II	15	7	8	15
		4	Welding NC II	15	0	0	0
	Total	4		80	37	26	63
		1	Electrical NC II	48	32	20	52
	TTI Khuruthang, Phunakha	2	Mechanical welder fitter NC II	40	23	10	33
2		3	Electrical NC III	24	5	4	9
		4	Mechanical welder fitter NC II	24	0	0	0
	Total	4		136	60	34	94
	TTI Rangjung, Trashigang	1	Automobile Mechanic NCII	15	12	0	12
		2	Electrician NCII	24	15	9	24
3		3	Computer Hardware and Networking NCII	15	7	8	15
		4	Furniture Making NCII	12	14	2	16
	Total	4	Total	66	48	19	67

	Samthang TTI	1	Automechanic NC II	28	43	4	47
		2	Auto electrician NC II	12	8	4	12
		3	Heavy Vehicle Driving	21	18	0	18
4		4	Heavy Earth Mover Operator	12	12	0	12
		5	Automachanic NC III	12	0	0	0
		6	MAC & RAC	12	0	0	0
	Total	6		97	81	8	89
		1	Auto Mechanic II	12	10	2	12
	TTI, Thimphu	2	Automachanic NCIII	12	0	0	0
		3	Auto Painting	12	5	6	11
5		4	Panel Beater NC II	12	6	0	6
		5	Refrigerator and Air conditioning	12	10	2	12
	Total	5	Total	60	31	10	41
		1	Carpentry	15	2	2	4
		2	Masonry	24	10	5	15
		3	Plumbing	15	5	9	14
	JWPTI, Dekiling, Sarbang	4	Mechanical Fitter	12	14	5	19
		5	Mechanical Welder	32	28	2	30
		6	Furniture Making (Fast track)	12	12	0	12
6		7	Trainsimission and Distribution	15	12	3	15
		10	Dual Training Program (DTP) Carpentry	15	3	1	4
		11	Dual Training Program (DTP) Masonry-	15	7	7	14
	Total	11		155	93	34	127

	Grand total			704	394	161	555
	Total	3		28	5	0	5
		3	Thagzo (Weaving)	8	0	0	0
8	NIZC Thimphu	2	Trezo ( Gold and Silver smith) NC III	8	0	0	0
		1	Patra (Wood Carving) NC II	12	5	0	5
	10101			<u> </u>			
	College of Zorig Chusum, Trashiyangtse	5 <b>5</b>	Shagzo / Saezo (Wood Turning) NC II	8 <b>82</b>	39	0 <b>30</b>	1 <b>69</b>
		4	Tshemzo (Tailoring) NC II	30	0	30	30
7		3	Troezo (Gold & Silver Smith) NC III	8	0	0	0
		2	Lhadri (Painting) NC II	12	13	0	13
		1	Patra (Wood Carving) NC II	24	25	0	25

# 15. Annexure

SI.No	Broad categories of field of study	Programmes
		Bachelor of Education (B. Ed) Primary
		Bachelor of Education (B. Ed) Secondary
		B.Ed Dzongkha
		Diploma in Physical Education & Sports Coaching
		PGDE in Dzongkha
		M.Ed in Dzongkha
1	Education	M.Ed in Educational Leadership & Management
		Diploma in ECCD
		B.Ed Primary ( DE )
		Master of Education(M. Ed) in Science and Maths
		Post Graduate Diploma in Education (PGDE)
		Post Graduate Diploma in Higher Education (PGDHE)
		Post Graduate Certificate in Higher Education (PGCHE)
	Arts & Humanities	Diploma in Language and Communication Skills
		Honours of Arts in Language and Literature
		Bachelor of Arts in Language and Culture
		Masters in Dzongkha and Choekey
		Bachelor of Arts in Language and Literature (BLL)
2		Bachelor of Arts in English Studies
2		Bachelor of Arts in English & Dzongkha
		Bachelor of Arts in English & Environmental Studies
		Bachelor of Arts in English Studies
		Bachelor of Arts in History & Dzongkha
		Postgraduate Diploma In English
		B.A in History and Dzongkha

	B.A in History
Arts & Humanities	Master of Arts in English
	BA in Political Science & Sociology
	Bachelor of Engineering in Civil Engineering
	Bachelor of Engineering in Civil Engineering (In-service)
	Bachelor of Engineering in Electrical Engineering
	Bachelor of Engineering in Electrical Engineering (In-service)
Engineering & Construction	Bachelor of Engineering in Electronics and Communication Engineering
	Bachelor of Engineering in Electronics and Communication Engineering (In-service)
	Bachelor of Engineering in Information Technology
	Bachelor of Engineering in Information Technology (In-service)
	Bachelor of Architecture
	Bachelor of Engineering in Instrumentation and Control Engineering
	Bachelor of Engineering in Engineering Geology
	Master of Engineering in Renewable Energy
	Bachelor in Engineering in Power Engineering
	Bachelor in Engineering in Mechanical Engineering
	Bachelor in Engineering in Surveying and Geo-informatics and engineering
	Diploma in Civil Engineering
	Diploma in Electrical Engineering
	Diploma in Mechanical Engineering
	Diploma in Electronics and Communication Engineering
	Diploma in Surveying
	B.Sc Food Science & Technology (Diploma Nested)
	Engineering &

		Bachelor of Commerce
		Master of Bachelor in Administration
		Bachelor of Business in Administration
		Diploma in Materials and Procurement Management
		Post Graduate Diploma in Public Administration(PGDPA)
		Post Graduate Diploma in Financial Management(PGDFM)
_	Business &	Diploma in Financial Management
5	Administration	Business Foundation
		Bachelor of Commerce in Finance
		Bachelor of Business Administration in Marketing
		Bachelor of Business Administration in General Management
		Business Studies
		Bachelor of Commerce in Accounting
		Bachelor of Arts in Economics
6	Law	Post Graduate Diploma in National Law(PGDNL)
0		Bachelors of law
		Community Health
		Dental Hygiene
		Clinical Counselling
		Dental Technician
		Foundation
7	Health & Allied	Medical Laboratory Technology
<b>'</b>	Sciences	Nursing and Midwifery
		Pharmacy
		Physiotherapy
		Public Health
		Radiography and Medical Imaging
		MD Emergency Medicine

		MD General Practice
		MD Medicine
		MD Obstetrics and Gynecology
		MD Orthopaedics
		MD Paediatrics
		MD Surgery
		MD Psychiatry
		MD Anaesthesiology
7	Health & Allied Sciences	MD Ophthalmology
		Masters in Traditional Medicine
		Bachelor in Traditional Medicine
		Diploma in Sorig Pharmacy
		Diploma in Traditional Medicine
		Diploma in General Nursing and Midwifery
		Post Graduate Diploma in Contemplative Counselling and Psychology (PGDCCP)
		Master of Arts in Contemplative Counselling and Psychology (MACCP)
	Agriculture, Forestry, Fisheries &	B.Sc Agriculture (Diploma Nested)
8		B.Sc Animal Science (Diploma Nested)
	Veterinary	B.Sc Forestry (Diploma Nested)
9	Services	Bachelor of Arts in Social Work
		Bachelor of Arts in Bhutanese and Himalayan Studies
		Honours of Arts in Bhutanese and Himalayan Studies
		Bachelor of Arts in Political Science & Sociology
10	Social Science	Bachelor of Arts in Anthropology
10	Social Science	B.A Geography & Economics
		B.A Economics & Population Studies
		B.A Population & Development Studies
		B.A Political Science & Sociology
	1	I.

		B.A Media Studies
11	Journalism & Information	B.A Media Studies & English
11		B.A Media Studies & Dzongkha
		Bachelor of Arts in Mass Communication
		Bachelor of Science in Information Technology
	Information &	Bachelor of Computer Applications
12	Communication	Bachelor of Science in Computer science
	Technology	Diploma in Computer System and Network
		B Sc in Computer Science
		Diploma in Library and Information Management (DLIM)
		Diploma in School Science Laboratory Management (DSSLM)
		B.Sc Environment & Climate Studies
		B.Sc Sustainable Development
		Master's in Development Practice
		M.Sc in Natural Resources Management
		Bachelor of Arts in Development Economics
		Bachelor of Science in Environmental Management
		Master of Education(M. Ed) in Science and Maths
13	Natural Science	Post Graduate Diploma in Contemplative Counselling and Psychology (PGDCCP)
		B Sc in Geography
		B Sc in Environmental Science
		B Sc in Chemistry
		B Sc in Physics
		B Sc in Life Science
		B Sc in Physics and Chemistry
		B Sc in Botany
		Diploma in School Science Laboratory Management (DSSLM)

	Mathematics & Statistics	B Sc in Mathematics
14		B Sc in Mathematics and Physics
		B Sc in Mathematics and Chemistry

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