Kathmandu University
School of Education

Master in Technical and Vocational Education and Training (MTVET)

Program Norms and Standards and Design and Courses

Approved by the 109th meeting of Academic Council held on 30 March 2018

March 2018
Kathmandu
Context

Technical and vocational education and training (TVET) has been recognized as a powerful tool for national development as well as for decent jobs for individuals leading towards a quality life. At the same time, the sector has been described as integral for the development of the workforce necessary for improving production and service sector in any country. Realizing these potentials, countries around the world have been investing for the growth of the sector. At the international level also efforts are being carried out for strengthening TVET.

In countries like Nepal the TVET sector has not been able to thrive and make anticipated contribution. Such dreams are still far away reality for many developing countries. There might be several reasons for such low performance of the sector including low economic activity and thus lack of job, low quality of education particularly in the TVET sector, lack of leadership and management capability, and so on. Hence, it has become essential that interventions be made in the sector so that it could contribute to national development process as expected. One such area of intervention that has become very much necessary is to develop the human resource capacity of the sector focusing on educational as well as on socioeconomic aspects. Master in Technical and Vocational Education (MTVE) in Kathmandu University, School of Education is an effort towards this direction.

The rationale of this program is established with growing TVET interventions in Nepal and in many other countries. Talking about Nepal, investment in the sector has increased substantially in recent years. Recent government policies have highly emphasized the development of the sector and has been introducing several programs in the sector. One such policy is TVET as one of the streams at secondary level. Likewise, private sector investment in TVET has also been growing. It is obvious that competent human resource is one of the key conditions for effective functioning of TVET in secondary education. Need for human resource development is not only for education sector but for other sectors as well. Growing activities of production and service sector in the country have been creating demand on skilled and competent human resource. International development partners working in Nepal are also active and accordingly making investment in the sector and are planning for more investment in the future.

Federalization of the country that created 753 rural and urban municipalities with constitutional right to plan, implement, and manage developmental activities within their jurisdiction, including school level education (TVET also) is going to build immense demand of skilled human resource. All these development provide strong rationale for initiating Master in Technical and Vocational Education (MTVE) in School of Education, Kathmandu University. Several rounds of formal and informal discussion with government and with private sector as well as with prospective students have established that such a program is an urgently felt need. A systematic research was also conducted to see the feasibility of such program which reported a very positive response on the need of such program.
Interests are also being expressed from the international community towards this program. Accordingly, the program is designed to suit the needs of international students as well. It is expected that there will be some international students in the program.

**Purpose**

Staying within the broad goal of creating better and relevant education opportunity for better life quality, the program specifically aims to address human resource development needs of TVET in particular and national development in general. Given this, the program specifically focuses on preparing TVET educators, system leaders, planners, and managers. The program also is designed to attract young ones in TVET by providing them quality, responsive, and relevant education and by linking the sector with socio-economic processes thereby providing promising career prospects nationally and internationally. With emphasis on experiential and work-based learning and entrepreneurship, the program aims to motivate graduates towards creating their own enterprise. In addition, developing TVET focused research capacity for building knowledge base in the sector is also one important aspect of the program. As the program works with multiple national and international actors, it aims to build strong network among all the concerned actors for creating synergy of efforts and achievements aiming to promote excellence, opportunity, and leadership in TVET.

**Graduate Attributes**

Graduates of MTVET are expected to gain advanced knowledge in TVET academic discipline. They will acquire necessary knowledge, exposure, and skills to lead and manage TVET institutions and programs more efficiently. Apart from content specific knowledge and skills, graduates are oriented towards culture of thinking, innovating, and acting upon that includes aspects like motivation, commitment, team work, networking, valuing others, creativity, empowering, etc. Graduates are also well versed on crosscutting themes on TVET like gender, inclusion, labor relations, ICT, etc. They are also expected to be critical, reflective, and ethical. MTVET graduates develop following specific knowledge and skills, among others:

- Be able to explore and interpret the interplay among social institutions and rules and resources, work and occupation, and TVET
- Be competent educators, innovators, leaders, and managers of TVET institutions/programs
- Be proficient to do economic and financial analysis of work and occupations, and TVET
- Be competent to perform TVET activities such as preparation curriculum, designing instructional events, delivering theoretical and practical sessions, evaluation of students.
- Be conversant with different theories, concepts, and ideas that have been developed and see TVET processes in terms of those theories and ideas
- Be capable to engage in TVET process e.g. policy dialogue, networking
- Be skillful to design, carry out, manage, and evaluate research on TVET
- Be expert to carry out mentoring and professional development
• Be able to understand, design, implement, and monitor quality assurance process

**Employment Prospects**

MTVET graduates enjoy a wide spectrum of employment opportunity. They could enter into teaching career focusing either as instructor or as leader/manager of TVET institutes, either in public or in private sector TVET institutes. Other option is to develop themselves as TVET planner, analyst, researcher, etc. and work in TVET related institutions or programs. More broad options could be on working with government organizations or with any other national or international development organizations that focus on TVET. Business and industry sector working TVET directly or indirectly could also provide a good destination for TVET graduates. More importantly, they could also develop their own enterprise, or work as mentor and professional supporter. Specifically, following organizations could provide employment prospects.

• TVET providers (polytechnics, technical and vocational schools, training centers)
• Research institutions or work as independent TVET researcher
• Government organizations
• Development organizations
• Business and industries
• Mentor and professional supporter
• Create enterprise

**Program Design**

Followings are design aspects of the program.

**Program duration**

• Two years or four semesters

**Total credit hours**

• 54 (1 credit hour is one hour per session per week for 16 weeks)
• Core courses - 15 credit hours
• Specialization courses (TVET Core) - 24 credit hours
• Concentration courses - 15 credit hours
  o There are two concentrations
    i) Pedagogy Stream,
    ii) System Management and Leadership Stream

  Students have to choose either Pedagogy stream or System Management and Leadership stream
**Assessment system**
- In-semester and end-semester
- Class based test, presentation, paper writing, project report, work/field report
- Publication

**Approach**
- Lecture, group/field work, seminar, panel, guest
- Self-research, writing, publishing, participating in discussion
- Work based learning, doing
- Interactive media based
- Blended with online mode (some courses could be offered in online mode)
- Intensive mode (some courses could be completed within two-three weeks)
- Inter-personal relations

**Class sessions**
- Except dissertation, all courses are of three credit hours
- Generally, one three-hour class session per day
- Library sessions, field sessions, work sessions

**Eligibility**
- Bachelor degree in any discipline with a CGPA of 2.5 out of 4 or second division (45%) in aggregate score
- Work experience in TVET is preferred

**Entrance**
- Written test (40% weightage) and interview (40% weightage) conducted in English
- Statement of the purpose for the study (10% weightage)
- Write-up (published or unpublished work) (10% weightage)

**Medium of Instruction**
- English

**Class size**
- 25

**Evaluation Scheme**
  a) Letter Grading System:
At the end of each semester, students are awarded letter grades which are based on grades and score obtained in various segments of the evaluation of the courses. Final evaluation of the course is carried out on a four point grading system as follows:

<table>
<thead>
<tr>
<th>Grade letter</th>
<th>Grade point</th>
<th>Qualitative meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>Outstanding</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>Very good</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>Fair</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>Poor</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Fail</td>
</tr>
</tbody>
</table>

b) Grade Point Average (GPA):
Each course grade is converted into the specific number of grade value associated with the grade. Grade Point Average (GPA) is calculated by multiplying the grade value of the earned grade by the number of credits for each course and dividing the total grade points by the total number of semester credits. The GPA must be 2.0 or above at the end of each semester, failing which the student is placed under probation and is required to improve her/his Cumulative Grade Point Average (CGPA) by the end of following semester.

c) Cumulative Grade Point Average (CGPA):
CGPA is calculated at the end of the program. For graduation, a student has to maintain a CGPA of at least 3 or above

d) CGPA Calculation
The overall academic performance of student is reported by CGPA, which is a weighted average of grade values calculated as follows:

\[
CGPA = \frac{(c_1g_1+c_2g_2+c_3g_3\ldots\ldots)}{c_1+c_2+c_3}
\]

Where \(c_1, c_2, \ldots\) denote credits associated with the course and \(g_1, g_2, \ldots\) denote grade values of the letter grades earned by the student in the respective course.
Program Courses

Following Table shows the program courses with their code numbers and credit hours.

<table>
<thead>
<tr>
<th>Course nature</th>
<th>Course code</th>
<th>Course name/Subject</th>
<th>Cr hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td>1</td>
<td>EDUC 508 Theory and Practice in Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>EDUC 509 Research Methodology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>EDTV 511 Statistical Methods for TVET</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Dissertation or two research projects</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDTV 544 Research Project I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDTV 546 Research Project II</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDTV 548 Dissertation</td>
<td></td>
</tr>
<tr>
<td><strong>Total credit of core courses</strong></td>
<td></td>
<td></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>Specialization Courses (TVET core)</td>
<td>1</td>
<td>EDTV 512 Principles and Theories of Education and Work</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>EDTV 513 Sociological Perspectives of Work and Occupation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>EDTV 521 Curriculum Development in TVET</td>
<td>3</td>
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<tr>
<td></td>
<td>5</td>
<td>EDTV 524 Quality Assurance and Program Evaluation in TVET</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>EDTV 525 Entrepreneurship, Start-ups, and Enterprises Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>EDTV 531 Labor Market Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>EDTV 542 Work Based Learning</td>
<td>3</td>
</tr>
<tr>
<td>Course nature</td>
<td>Course code</td>
<td>Course name/Subject</td>
<td>Cr hrs.</td>
</tr>
<tr>
<td>---------------</td>
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<tr>
<td></td>
<td></td>
<td>Total credit of specialization courses (TVET core)</td>
<td>24</td>
</tr>
<tr>
<td>Concentration Courses</td>
<td></td>
<td><strong>Concentration 1: TVET Pedagogy</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>EDTP 526</td>
<td>Psychology of Learning</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>EDTP 532</td>
<td>Instructional System Design</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>EDTP 534</td>
<td>Instructional Media Development</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>EDTP 536</td>
<td>Assessment and Measurement</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>EDTP 538</td>
<td>Mentoring and Professional Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total credit of concentration courses</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Concentration 2: TVET System Management and Leadership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>EDTS 527</td>
<td>Public Policy and TVET Governance</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>EDTS 533</td>
<td>Management of TVET Institutions and Programs</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>EDTS 535</td>
<td>Leadership Theories and Practices</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>EDTS 537</td>
<td>Economics and Financing of TVET</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>EDTS 539</td>
<td>Assessment and Accountability in TVET System</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total credit of concentration courses</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total credit of all courses</strong></td>
<td><strong>54</strong></td>
</tr>
</tbody>
</table>

Upon approval from the Program Coordinator, students are allowed to take at least one course (3 credit) from other concentration, programs of School of Education, or from other Schools of Kathmandu University. Such course needs to be relevant for the program. In such case, the concerned student does not need to take one course from among the Specialization or TVET core courses excepting EDTV 512 Principles and Theories of Education and Work and EDTV 542 Work Based Learning.
Course Description

Core Courses

**Theory and Practice in Education**  
(3 Credit)

Course code – EDUC 508

*Course Description:*

This course is designed for enabling students to explain the need for social foundation of education in relation to components of education curriculum, method of teaching, and assessment with an emphasis on enhancing learning and competencies. It deals with aspects like growth of ideas of education, socioeconomic and political contexts of education, modes of education in different areas, and emerging issues in education. These discussions are made particularly in the context of TVET.

*Objective of the course:*

The course aims to help students in understanding major philosophies of education with respect to the aims of education, educative process, curriculum, governance, role of teachers, and learners. The course also aims to help students to be able to describe critically the major educational systems, reforms and educational movements leading to the development of present day practices of education and schooling. One other aim of the course is to help students assess and identify the educational problems and issues at the national and international level and at the same time be innovative in trying to find appropriate responses to these problems.

*Course Contents:*

- Education in historical context
- Philosophies of education
- Learning and assessment – theory and practice
- Education systems in the 21st century
- Significant social phenomena in relation to education
- Emerging issues in education

**Research Methodology**  
(3 Credit)

Course code – EDUC 509

*Course Description:*

This course is developed for providing opportunity to the students for familiarizing with both quantitative and qualitative as well as mixed methods research. It provides insights on all key aspects of designing, carrying out, and disseminating research through publications and other means. The course also have aspects of evaluating research projects.
Objective of the course:

The course aims to help students for acquiring key tenets of quantitative (i.e. positivistic), qualitative (i.e. interpretive and beyond), and mixed methods research designs. It starts from the introduction of research traditions and moves to different aspects of designing and carrying out different types of research. It also aims to develop competency among students on presenting and disseminating research findings as well as evaluating and managing research projects through publications, presentations, etc.

Course Contents:

- Orienting towards foundations of research and their types
- Reviewing literature
- Conceiving research methodologies
- Maintaining quality standards and ethical issues
- Analyzing and discussing data and drawing findings and conclusions
- Presenting and disseminating research findings
- Evaluating and managing research projects

Statistical Methods for TVET research (3 Credit)

Course code – EDTV 511

Course Description:

This course is designed to provide basic knowledge and skills on positivistic researches. It intends to emphasize the application and interpretation of statistical analyses of data so that some meaningful conclusions could be drawn. The course focuses on using different statistics as tools of data analysis in research.

Objective of the course:

The course aims to help students to understand statistics and its importance and scope in research and make them competent in meaningful use of different statistics like descriptive, correlation and inferential statistics in analyzing data. The course also aims to help students on organizing, summarizing, and presenting data in a meaningful way for drawing meaningful interpretations of research findings. Use of statistical package(s) is an integral part in this course making students capable to use such packages independently for statistical analyses.

Course Contents:

- Introduction of quantitative research and statistics
- Hypothesis testing (Inferential statistics)
- Regression analysis (Inferential statistics)
- Use of statistical software in data analysis
- Doing project work
Dissertation or two Research Projects  
(6 Credit)

Research Project I
Course code – EDTV 544

Course Description:

This course is designed to foster critical and creative thinking of the students with an outcome of the thematic article on TVET related theme based on the extensive literature review under that theme. A literature review process helps students identifying and analyzing the theme under review in relation to the research problem being investigated. The students are expected to demonstrate their skills of summarizing and synthesizing critically the main ideas of the theme with the aim of generating new knowledge from reading and writing activities.

Objective of the Course:

The course aims to cultivate scholarly engagement of the students to write a thematic paper in their field of study. It also prepares students to publish their articles in the academic forum. It provides an excellent starting point for researchers beginning to do research in an area of interest by requiring them to summarize, evaluate, and compare original research in that specific area. Likewise, it also ensures to foster creativity of the students avoiding duplication of the work.

Course Contents:

As part of the course, students prepare a literature based research paper which they are required to defend in front of the Research Committee of the School. They are also required to publish their research findings/conclusions and present them in some forum.

Research Project II
Course code – EDTV 546

Course Description:

This course is designed to strengthen the skills and knowledge of empirical research methods with an outcome of the research article based on the field work. The students are expected to conduct an extensive field work to understand their research issue. In doing so, they develop themselves as competent social science researcher. Such competency is expected to build insights in them to develop their argument, to frame their research process and to recognize the voice of the people for deeper and contextual understanding of individuals and institutions and processes and phenomenon.

Objective of the Course:

The course aims to cultivate scholarly engagement of the students to write a research paper following a systematic process of the research. In doing so, they select research issue, problematize it, conduct empirical study, and present all findings in comprehensive way to make
a research article. The course aims to foster research, writing and publication skills of the students.

Course Contents:

As part of the course, students prepare a filed based research paper which they are required to defend in front of the Research Committee of the School. They are also required to publish their research findings/conclusions and present them in some forum.

Dissertation

Course code – EDTV 548

Course Description:

This course is designed for enabling students to conduct the research project and write dissertation following some appropriate methodology and procedures. Main focus of the course is to make students capable of conducting research independently with special focus on TVET. All students are assigned one Supervisor for guiding them in their research.

Objective of the course:

The two aims of this course are: one, building students’ skills, knowledge, and experience on designing and carrying out research projects independently, and two, enhancing their capability to identify some key issues related to TVET and analyzing and presenting them critically using research based information and staying within some theoretical/conceptual perspective. The main aim is to make students able to see, analyze, understand, and explain some TVET processes and phenomena and contribute to generate knowledge.

Course Contents:

As part of this course students have to work on their individual research project which begins by developing a proposal for their research and then carrying out research working on some TVET related theme. As the outcome of the research they carry out, they prepare a dissertation and defend in front of the Research Committee of the School. As part of the course, students are also required to publish their research findings/conclusions and present them in some forum.

Specialization Courses (TVET Core)

Principles and Theories of Education and Work (3 Credit)

Course code – EDTV 512

Course Description:

This course is designed for enhancing students’ capacity in seeing work and education in terms of philosophical and theoretical perspectives as well as in national and international socioeconomic context. Critical review of the situation in terms of aspects like equitable access,
inclusiveness, affordability, etc. and examining the role of the government to ensure these constitutional rights are also important aspects of the course. It also provides insights on school to work transition or linkage to formal and informal labor market

**Objectives of the course:**

This course aims to help students for understanding work, and education for work from the perspective of national economy, society, and culture. It also provides the students the knowledge on essential aspects for developing effective TVET system and critically review the existing system in respect to those aspects. The course also works for enhancing knowledge and skills important to explore and discuss the positive effects of TVET on the informal and formal labor market and identify requirements and guiding principles for successful results.

**Course Contents:**

- Theories and principles of work and education for work
- Aspects of an effective TVET system
- TVET systems in terms of national and international context
- Linkage between TVET, employment in formal and informal sector and income
- Issues and challenges of TVET sub-sector, reform needed in the changing context

**Sociological perspectives of Work and Occupation**

(3 Credit)

Course code – EDTV 513

**Course Description**

This course is designed to involve students in analyzing work and occupations and TVET using sociological perspective. It also helps students bring the perspectives of power and politics in understanding work, work relations, and work institutions including TVET institutions.

**Objective of the course:**

The course aims to help students for applying sociological perspectives in understanding work and occupational life of the people, their relations, and changes seen in these relations. It also helps students to study work and occupation related social institutions and interaction of such institutions with other social processes and phenomena. The course focuses on providing theoretical and experiential knowledge to students on analytical skills on work and occupation as social institution as well as social process.

**Course Contents:**

- Society and sociology
- Work and occupation as social institution and as social process
- Theories of sociology in understanding work and occupation
- Power and politics in division of labor
- Equity and inequity in work and occupations
• Traditional informal work learning

Curriculum Development in TVET (3 Credit)
Course code – EDTV 521

Course Description:
This course is designed for making students capable for examining curriculum issues, trends, and innovations in curriculum design in TVET. It also focuses on current research in TVET curriculum and its practical application in instruction. In addition, special attention is given to the development of occupational curriculum and the linkages between the academic and the real world of work. The course also discusses the competency-based curriculum and skills and knowledge needed for it.

Objectives of the course:
This course aims to help learners to gain advance understanding on the foundations and the theoretical underpinnings of curriculum design in TVET. It provides insights on approaches and practices of TVET curriculum development. The course also aims providing knowledge and skills of analyzing occupations and jobs, specifying tasks and objectives. Students also learn performing TVET focused curriculum design, evaluation, research and innovation and designing and practicing competency based curriculum.

Course Contents:
• Foundations of curriculum development in TVET – its theory and perspectives
• Principles and practices of curriculum development in TVET
• Competency based curriculum
• Overview of occupations, industries, learner and contextual characteristics
• Human behaviors and performance
• Curriculum evaluation and review
• Research and innovations in curriculum development

Principles and Practices of Human Resource Development (HRD) (3 Credit)
Course code – EDTV 523

Course Description:
This course is designed for helping students for acquiring contemporary perspectives that illuminate concerns, concepts, arguments, and evidence of Human Resource Development (HRD). As the process of HRD at work is an integral part of the overall performance of organizations, practices and challenges of HRD at work sector is the key aspect of the course.
Objectives of the course:

This course aims to help students on acquiring the concepts related to HRD in general perspective and particularly in the context of TVET and bringing from national and global perspectives. It aims to increase students’ competency on using HRD concepts in career development, addressing human performance challenges, and in improving staff productivity. The course also deals aspects like planning, implementing, managing, and evaluation HRD programs as well as some other key aspects related to HRD like coaching, mentoring, counseling; intellectual capital, organizational learning and learning organizations.

Course Contents:

- HRD in global perspective, HRD- Performance link, Strategic perspectives
- Competency mapping, designing, planning, managing, and evaluating HRD programs
- Coaching, mentoring and counseling
- Career planning, management, and development
- Intellectual capital (IC), its measurement and management
- Organizational learning and learning organizations

Quality Assurance and Program Evaluation in TVET (3 Credit)

Course code – EDTV 524

Course Description:

This course is designed for providing students with theoretical and practical knowledge on quality assurance and program evaluation and their importance and use in TVET sector. It also provides skills for performing TVET program evaluation including principles of a TVET quality assurance system and establishment of TVET quality standards. The course also focuses on providing insights on interlocking components for monitoring and evaluation with reference to finance, access and equity, participation as well as quality and relevance.

Objective of the course:

This course aims to help students understand the concepts, guiding principles and importance of quality assurance and program evaluation in TVET for acquiring knowledge and skills for assuring quality of TVET programs and projects utilizing program evaluation models and approaches. More specifically, the course aims to make students capable to identify and assess the needs related to quality assurance in TVET and verify or develop goals and objectives of TVET programs and projects. Besides, the course also focuses on increasing students’ competency to design and use relevant approach and tools of data collection and analyze data and write convincing data-supported quality assurance and program evaluation report.

Course Contents:

- TVET focused concepts of quality, and quality assurance systems and frameworks
- TVET focused concepts, approaches and models of program evaluation
• Evaluation of program, quality, and effectiveness in TVET
• Evaluation of program relevance, access and equity in TVET
• Evaluation of program efficiency (Cost benefit analysis, ROI)

**Entrepreneurship, Start-ups, and Enterprises Development (3 Credit)**

Course code – EDTV 525

**Course Description**

This course is prepared for equipping students with the basic concepts, processes, and techniques related to entrepreneurship, start-ups, and enterprise development. It develops innovative and entrepreneurial mindset in them and facilitates them to develop and apply their ideas for starting-up their own enterprise as well as for institutions, projects, or policy making bodies. The course also deals with the concept of social entrepreneurship and social enterprise.

**Objective of the course:**

This course aims for helping students to learn the ideas of entrepreneurship, start-ups, and enterprise development in both domestic as well as international perspectives. It aims to direct students’ thinking towards innovative entrepreneurial business ideas and intends to support them towards such endeavor of them. The course provides them theoretical insights and practical tips for converting innovative entrepreneurial ideas into a viable enterprise. Efforts are also directed towards networking with other technical, financial, administrative, and legal service agencies for starting an enterprise. The course also focuses on the concept and importance of social entrepreneurship and enterprises. Likewise, it also aims to focus on developing students’ capability for development and management of an enterprise.

**Course Contents:**

• Introduction to the concepts of entrepreneurship, start-ups, and enterprise
• Developing entrepreneurial business ideas – preparations, opportunities, and challenges
• Converting business idea into an enterprise
• Social entrepreneurship and enterprise
• Managing and developing the enterprise

**Labor Market Analysis (3 Credit)**

Course code – EDTV 531

**Course Description:**

This course is prepared for making students able to understand and explain the relationships among demographic, economic and employment trends; labor force participation and their education and training; and the role of TVET in the preparation of workforce for high skills high wage jobs. It critically engages students with explanations for current labor market
problems arising from inefficiency of skills and education or other issues such as the dynamics of labor earnings, causes of low wages, low skills, and workers’ unions.

**Objectives of the course:**

The course aims for helping students for analyzing labor force supply situation, demand situation and explore the skills gap utilizing primary or secondary information, prioritize occupational skills on demand and identify most relevant TVET programs to address the skill demands of the labor market. It also aims for providing skills and knowledge to students required for designing and conducting labor analysis survey to collect labor market information, process data by utilizing appropriate computer program/system to generate needed (real time) labor market information in TVET.

**Course Contents:**

- The labor market system and the factors influencing it
- Review of selected theories of the labor market
- The demand for labor in the short and longer run
- Collecting, analyzing, disseminating Labor Market Information (LMI)
- Education employment linkage
- Tools and Techniques of labor market Analysis

**Work based learning**

Course code – EDTV 542

**Course Description:**

The course is mainly a practice based course designed to provide conceptual foundation as well as practical exposures of work-based learning. The students spend time in their chosen areas of work in real work situation (working in institutions). Their work is guided by the structure of workplace-based learning prepared by the course tutor. After the end of the exposure, the students prepare a report to share their own personal experience of being at real world of work. Such report may be written in the form of analytical, interpretive, or narrative report.

**Objective of the course:**

This course aims to help students to develop perspectives on design, implementation and evaluation of work-based learning. It also provides students to reflect upon own personal experiences while being in the real world of work where they try to apply the concepts, skills, and dispositions learned in various subjects and classes during the course. The course also aims to provide students an understanding of conceptual foundations, models, and approaches of work-based learning, aspects of quality assurance and evaluation of work-based learning context.

**Course Contents:**

- Concepts, approaches, and models of work-based learning
- Quality assurance in planning, implementation and evaluation of work-based learning
- Role of employers in the work-based learning
- Inter-personal relations, human behavior, and psychology

**Concentration Courses**

**Concentration1: TVET Pedagogy**

**Psychology of Learning**  
(3 Credit)

Course code – EDTP 526

*Course Description:*

This course is designed for enabling students in understanding and applying key concepts of theories of learning. It focuses on theoretical aspects of psychology related to learning and behavior. The course deals with key issues in psychology of learning, such as nurture and nature, retention and meaningfulness in learning, cognition and behavior, to name but a few.

*Objectives of the course:*

The course aims at helping students to acquire key issues linked with various schoolings of learning theories such as instrumentalist, cognitivists and constructivists. Likewise, the course also is a space for discussing instrumentalists learning theories arising from behaviorist school whereas the course further helps students discuss cognitivist and constructivist learning theories. While the course aims to provide opportunities to explore sociocultural theories of learning, it also gives emphasis on contemporary issues associated with the psychology of learning, such as artificial intelligence, neurobiology, information processing models.

*Course Contents:*

- Key issues of learning
- Instrumentalist theories of learning
- Cognitivist and constructivist theories of learning
- Sociocultural perspectives of learning

**Instructional System Design**  
(3 Credit)

Course code – EDTP 532

*Course Description:*

This course is designed for enabling students to develop, implement, and evaluate instructional design in order to make the learning more effective and enjoyable. It provides students with the fundamentals of instructional design including the principles of learning theory, and instructional strategies that are relevant to instructional design.
Objective of the course:

This course aims to help students on performing instructional design, delivery and evaluation of at least three different types (i.e. constructivist, behaviourist, critical). It also provides purpose and approaches of instructional design and their processes. The course focuses on raising the competency of students in identifying the learning needs and the goals, and design and implement the learning interventions. Students also learn to compare various instructional models and analyse the phases of the design process.

Course Contents:

- Identification and comparison of various ISD models and analysis of the phases of the ISD process
- Learning theories
- Instructional system design, models and strategies used for various types of learning
- Learning objectives and assessment items using Bloom’s taxonomy
- Designing learning activities and assessment for learning

Instructional Media Development  
(3 Credit)

Course code – EDTP 534

Course Description:

This course is designed for enabling students to gain advance understanding on instructional strategies, media selection techniques, and to create well-designed and effective media appropriate for educational settings. The course also deals with theories and practices of instructional media development. Focus is given for using IT based technologies.

Objective of the course:

This course aims for helping students to acquire knowledge and skills of instructional strategies and techniques backed up by the use of theories and models that is appropriate to support the design of print-based, web-based, or multimedia-based instruction. In addition, focus is given to raise their competency in evaluating existing instructional practices both formatively and summatively to make well-informed decisions regarding modification to materials (formative) or to determine the value of existing materials for possible adoption (summative).

Course Contents:

- Instructional materials and media for effective communication
- Theories and models of instructional media development
- Stages of instructional media development
- Use of different types of media and their effectiveness in learning
- Technology and the instructional issues
Assessment and Measurement  (3 Credit)
Course code – EDTP 536

Course Description

This course is prepared for helping students for understand meaning, importance and methods of performing assessment and measure and their roles and importance in students’ learning. It prepares students enabling for designing, developing and implementing evaluation related activities with special focus on TVET.

Objectives of the course:

The course is aimed for helping students to understand the concepts of measurement, assessment and evaluation as well as related tools and indexes. The course also aims to provide knowledge and skills on different types of tests and assessments as well as information on different forms of evaluation including student evaluation, curriculum evaluation, and institutional evaluation. One of the focuses of the course is to make students aware on seeing how these concepts are related to students’ learning.

Course Contents:

- Understanding measurement, assessment and evaluation, differences among the terminologies, narrow and broad meaning of evaluation
- Statistical and non-statistical tools, scales, descriptive statistics, various indexes required for measurement
- Continuous assessment, task-based and authentic assessment, portfolio assessment, testing and assessment
- Forms of evaluation, student evaluation
- Learning in relation to different concepts of assessment and measurement

Mentoring and Professional Development  (3 Credit)
Course code – EDTP 538

Course Description:

This course is designed to provide students a comprehensive understanding of different professional and theoretical perspectives on mentoring and professional development. Seeing mentoring as a strategy for professional development, it looks on the major issues of recruitment, retention, professional development as well as development of a multicultural workforce. Focus is also given to understand the context that is important for effective mentoring.

Objective of the course:

The course aims at helping students to develop their self-awareness through critical reflection and evaluation of their own experiences of mentoring and professional development. Professional development of the student is based on the mentoring with an expert/experienced
worker. It also aims to provide theoretical perspectives on mentoring and their modes and approaches. The focus is on making students aware on transferring skills and knowledge through mentoring for the purpose of raising staff performance and productivity.

**Course Contents**

- Theoretical perspectives applied to mentoring
- The history, rationale and current frameworks for mentoring programs
- Styles, types and various modes of mentoring
- Transfer of skills and learning through mentoring
- Contexts, opportunities for, and constraints towards effective mentoring

**Concentration 2: TVET System Management and Leadership**

**Public Policy and TVET Governance**  
(3 Credit)

Course code – EDTS 527

**Course Description:**

This course is designed for preparing students to analyze and practice policy discourse that includes problem analysis, decision making, challenges, policy implementation, and policy evaluation in TVET sector at all levels of TVET governance both in national and international context. The course also deals with TVET governance at different levels, a) a macro, b) meso, and c) micro context, i.e. at national/federal, provincial, and local levels.

**Objective of the course:**

The course aims for helping students for equipping with multiple theories and concepts, methods and tools, subject areas (e.g. economics, political science, sociology), and work with multiple actors and institutions at multiple levels while analyzing policy process. The course also aims to prepare the students to perform problem analysis, prepare and analyze mapping of actors and institutions, and critically think and conduct TVET policy dialogue processes.

**Course Contents:**

- Problem analysis, policy making, and implementation of TVET policy development process
- Actors and institutions of policy making and implementation
- Policies for change and transformation
- Understanding models of governance tires (national/federal, provincial, and local)
- Decision making process and priorities, policy failures
- Authority, accountability and feedback process
Management of TVET Institutions and Programs  

Course code – EDTS 533

Course Description:

This course is designed for preparing students with theories, concepts, processes, and techniques related to organizations and organizational process such as motivation, communication, conflict, and other behavioral perspectives for effective management of TVET organizations/institutions and programs. Further, the course focuses on general principles of management and how these concepts are utilized while carrying out the duties of manager for efficient management of TVET institutions/programs.

Objective of the course:

The course particularly aims at providing students an understanding of organization theory, organizational behavior, and management theories and practices within the context of TVET institutions. The course also aims to prepare the students with theoretical foundations and the skills on management functions including planning, organizing, leading, regulating and the evaluation of TVET institutions.

Course Contents:

- Introduction to management and its functions
- Planning (process)
- Organizing (organizational structure and design, managing human resources, managing change and innovation)
- Leading (understanding individual behavior; understanding group behavior; motivating and rewarding employees; leadership and trust; managing communication and information)
- Regulating (foundation of regulation; budgeting practices)
- Institutional evaluation

Leadership Theories and Practices  

Course code – EDTS 535

Course Description:

This course is designed to enable students to discuss and internalize integrations among groups of individuals, individuals, and overall environment within an organization in which leadership functions. The course also focuses on exploring the characteristics of effective educational leader. It also provides insights for critically reviewing educational leadership theories and relate their connections while leading TVET institutions, programs or projects.
**Objective of the course:**

This course aims to help students on acquiring theories related to leadership styles and examine the use of those styles in situations while leading TVET institutions. The course also focuses on exploring the characteristics of effective educational leader. It also provides insights for critically reviewing educational leadership theories and relate their connections while leading TVET institutions, programs or projects.

**Course Contents:**

- Understanding leadership and TVET leadership
- Leadership theories and styles and leading TVET institutions
- Leading change in TVET
- Leadership, communication, and decision making
- Developing conducive culture and climate in organization

**Economics and Financing of TVET**

(3 Credit)

Course code – EDTS 537

**Course Description:**

This course is designed for equipping students with the critical understanding on various facets of economics and financing in TVET. This enables them to use the available economic and financial tools for decision making processes on resource allocations in TVET sector. Further, it enables students to use these understandings in political economic setting of a country.

**Objective of the course:**

This course aims to help students to acquire theoretical knowledge and practical skills on different facets of economics and financing with special focus on TVET. It also aims to help students understand the macro-economic analyses, demand side and supply side in financing of TVET sector as well as concerns of adequacy, equity and efficiency in TVET financing. They learn dimensions of public policies, public spending and their effect on the world of work. Both international as well as domestic perspectives on TVET economics and financing are considered in the course.

**Course Contents:**

- Theories and practices of economics and financing TVET
- Public policies, public spending and their effects on world of work
- Foreign aid – grants and loan – and its effect
- Economic growth, distribution/redistribution, unemployment, inflation, etc.
- Returns of investment - rational of public investment in TVET, cost benefit analysis
- TVET financing and factors affecting it
- Cost of education, cost of TVET and alternative sources of financing for TVET
Assessment and Accountability in TVET System  
(3 Credit)

Course code – EDTS 539

Course Description:

This course is designed to prepare students for assessing and maintaining accountability in the TVET institutions and the system as a whole in a competent manner. Providing changed understanding on assessment and accountability in holistic manner, the course stresses on the analysis of the context and design accountability policy and mechanism in micro, meso and macro perspectives.

Objective of the course:

The course aims to help students for understanding the interrelationship of assessment and accountability with special focus on TVET institutions, programs and the system as a whole. It provides the students the knowledge and skills necessary to develop standards for the assessments and formulate necessary mechanism for maintenance of accountability. It also provides the TVET assessment and accountability process addressing the national as well as provincial and local capacities and interests, in both national as well as international context.

Course Contents:

- Accountability and assessment in TVET system
- Designing and implementing learning standards and assessments and accountability in the context of TVET system
- Interrelationship between assessment and accountability
- Assessment and accountability in the context of multi-level functioning and governance of TVET
Annex I

Kathmandu University, School of Education

Norms and Standards for MTVE Program in KUSOED

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Norms and standards</th>
<th>Planned for acquiring</th>
<th>Available facilities</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human Resource</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty-student</td>
<td>1:18</td>
<td>1:18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Professor - 1</td>
<td>4</td>
<td>3 (1 each for research and related subjects, pedagogy and related subjects, and system management and leadership related subjects)</td>
<td>Available for all three key areas (research, pedagogy, and system management and leadership)</td>
<td></td>
</tr>
<tr>
<td>Associate Professor - 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Professor - 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin/Exam Officer</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support staff</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attendant</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting faculty</td>
<td></td>
<td></td>
<td></td>
<td>TVET scholars (Nepali/foreign) are available</td>
</tr>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class room</td>
<td>2 (40 sqm)</td>
<td></td>
<td></td>
<td>Existing rooms are to be used</td>
</tr>
<tr>
<td>Computer lab</td>
<td>1 (40 sqm)</td>
<td></td>
<td></td>
<td>Use the existing computer lab</td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td>Add needed books, journals and other resources</td>
<td>Use the existing library</td>
<td></td>
</tr>
<tr>
<td>Office room</td>
<td>1 (10 sqm)</td>
<td></td>
<td></td>
<td>Existing rooms are to be used</td>
</tr>
<tr>
<td>Faculty room</td>
<td>1 (10 sqm)</td>
<td></td>
<td></td>
<td>Existing rooms are to be used</td>
</tr>
<tr>
<td>Meeting room</td>
<td>1 (20 sqm)</td>
<td>2</td>
<td></td>
<td>Use existing meeting rooms</td>
</tr>
<tr>
<td>Canteen</td>
<td>1</td>
<td>1</td>
<td></td>
<td>Use existing canteen</td>
</tr>
<tr>
<td>Toilets (boys, girls, disables)</td>
<td>Toilets for boys, girls, disables</td>
<td>4 for boys, girls and 1 for disable</td>
<td>Use existing toilet facilities</td>
<td></td>
</tr>
<tr>
<td><strong>Particulars</strong></td>
<td><strong>Norms and standards</strong></td>
<td><strong>Planned for acquiring</strong></td>
<td><strong>Available facilities</strong></td>
<td><strong>Remarks</strong></td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------------------------------------------</td>
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</tr>
<tr>
<td>Drinking water</td>
<td>Constant supply of clean drinking water</td>
<td></td>
<td>Constant supply of clean drinking water</td>
<td>Use available supply of water</td>
</tr>
<tr>
<td>Open space for garden/playground/parking</td>
<td>2000 sqm open space for garden/playground/parking</td>
<td></td>
<td>2000 sqm of open space</td>
<td>Use existing</td>
</tr>
<tr>
<td>Fire extinguisher</td>
<td>4</td>
<td></td>
<td>7</td>
<td>Use existing</td>
</tr>
<tr>
<td>Solar system or generator</td>
<td>1</td>
<td></td>
<td>1</td>
<td>Use existing</td>
</tr>
</tbody>
</table>

**Learning Resources**

| **Computer set (UPS)**                | **35**                                              | **30**                    | **Use existing**          |
| **Printers**                          | **10**                                               | **5**                     | **10**                    | **Use existing**                |
| **Photo copier**                      | **3**                                                 | **1**                     | **3**                     | **Use existing**                |
| **White Board / Smart Board**         | **One per classroom**                                |                           |                           | **Use existing**                |
| **Projectors/multi-media**            | **One per classroom**                                |                           |                           | **Use existing**                |
| **Internet connectivity**             | **20 by 20 mbps dedicated feeder, optical fiber**     |                           |                           | **Use existing**                |
| **Software**                          | **To be added as per the need**                       |                           |                           | **Use existing**                |
| **Journals, books, other resources**  | **To be added as per the need**                       |                           |                           | **Use existing**                |
| **Desk and benches**                  | **25 per classroom**                                 |                           |                           | **Use existing**                |
| **Office furniture**                  | **7 tables, 7 chairs, 7 computer tables, 7 cupboards**|                           |                           | **Use existing**                |