



COMMONWEALTH *of* LEARNING



# **A GUIDE TO INTEGRATING EMPLOYABILITY IN HIGHER EDUCATION INSTITUTIONS:** The Commonwealth of Learning's Employability Model

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Professor Romeela Mohee



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The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources and technologies.



Commonwealth of Learning, 2019

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*A Guide to Integrating Employability in Higher Education Institutions: The Commonwealth of Learning's Employability Model*

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## Foreword by Professor Kanwar



Around the world, governments and businesses are facing challenges arising from the mismatch between degrees and the skills required for work; at the same time, there are high levels of youth unemployment and a

shortage of young people with critical skills. In a McKinsey survey of young people and employers in nine countries, 40 percent of employers said lack of skills was the main reason for entry-level job vacancies, and 60 percent said new graduates were not adequately prepared for the world of work (McKinsey, 2017). At the same time, young people feel their skills are not fully utilised in their current employment.

In this “brave new world,” how can universities prepare work-ready graduates with relevant skills? Most employers seek people skilled in such areas as problem solving, communication, teamwork and creativity, whereas potential graduates are focused on their ability to achieve higher grades. But as a recent OECD report states, “young people have to be prepared for the jobs of the future by ensuring that they are equipped with the right type of skills to successfully navigate through an ever-changing, technology-rich work environment” (OECD, 2016).

To address this challenge, the Commonwealth of Learning has developed an Employability Model, which starts with using a scorecard to assess the employability readiness of the institution. Based on the gaps identified, an employability strategy

is developed through stakeholder consultation. This is followed by a competency-based mapping of learning outcomes to the requirements of the labour market. This model also includes guidelines for integrating work-based learning and soft skills into curricula. The model has been piloted at the Open University of Mauritius and the University of Namibia, resulting in curricular reform and the development of systems to prepare learners for the world of work.

The role of higher education is changing, and institutions must reinvent themselves to remain relevant to the needs of the 21<sup>st</sup>-century learner. *A Guide to Integrating Employability in Higher Education Institutions* is a small step in that direction. The guide has practical tools that are especially useful in the context of the developing Commonwealth. It provides a clear pathway for higher education institutions to develop employability strategies and review their curricula based on the needs of employers and society. Each institution is different and has its unique needs — the guide can be customised to suit specific situations and contexts.

I hope that you will find the guide a useful tool for implementing employability-readiness strategies in your institutions and will use it to prepare our graduates for the uncertain and changing world of work.

A handwritten signature in black ink that reads 'Asha Kanwar'.

Professor Asha Kanwar  
President and CEO  
Commonwealth of Learning

# Preface

Around the world, institutions of higher education are deeply considering how to better develop employability among their students. Although their strategies are diverse, their goals are the same: to better enable students to develop the skills and characteristics needed to thrive in work and life, well beyond their time in university.

With these goals in mind, the purpose of this guide is to provide a basis for enabling teams to “develop” their employability strategies at their home institution. Specifically, this guide helps teams carefully consider how diverse practices — throughout an academic journey — can help students comprehensively develop valued, transferable and useful employability traits and characteristics.

*A Guide to Integrating Employability in Higher Education Institutions* is designed to support the implementation of the Commonwealth of

Learning’s Employability Model. Each section begins with an overview of the specific phase to be described and provides detailed notes for how to implement each proposed activity. Wherever possible, examples are provided to help you visualise how the activity is being deployed at other institutions. Additional links, resources and examples are also included to help further your learning and provide inspiration.

We thank you for your engagement and wish you the best as you endeavour to grow employability outcomes for graduates and other learners at your home institution.



Professor Romeela Mohee  
Education Specialist: Higher Education  
Commonwealth of Learning





# Employability



# 1.0 What Is Employability?

## 1.1 A Simple Definition

Employability is described variously by different scholars, yet at its core, employability can be defined as: the medley of attributes, competencies and skills needed to increase the likelihood of an individual securing gainful employment after completing a programme of study or training.

In this way, employability is linked to employment but is not a guarantee of or measure for securing employment. Instead, employability is a quality or characteristic that describes the readiness of an individual to enter the workforce, stay in a place of work, and move to other jobs.

Mantz Yorke's (2006, p. 8) definition of employability is frequently cited as foundational

because it includes many of the commonly accepted characteristics:

**“A set of achievements — skills, understandings and personal attributes — that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.”**

## 1.2 The Importance of Context

Although there is general consensus about what ideas constitute employability in the broad sense, employability is, in fact, better understood as a living term that is subject to change. This fluidity is due, in large part, to two factors: social context and social change.

Employability is directly influenced by its context because the attributes, competencies and skills that constitute employability should — when considered comprehensively — vary from region to region and according to industry sector. Different results emanate from the varying needs of a specific region's workforce, community and economy. For example, the specific skills and competencies that are desirable in a region with a predominantly resource-based economy may differ from those needed in a predominantly agriculture-based region. While some traits

and skills may be desirable in both places, good consideration of employability carefully assesses the differentiated, context-specific needs of different regions and sectors.

Accordingly, the attributes, skills and competencies that comprise employability will also change as the needs of society change. This is particularly true in terms of technological and cultural advancements. As new technology emerges and is utilised, and as new ways of understanding the world are introduced and employed, there is a perpetual need for new skills, mindsets and knowledges. These technological and cultural shifts should also be considered when thinking about employability.



**Figure 1. Aspects of employability**

Adapted from the Commonwealth of Learning Employability Model (2019)

## 1.3 Why Universities Should Consider Employability

All around the world, institutions are under growing pressure to demonstrate the value of higher education. With the cost of education (and living) continuously increasing, diverse stakeholders, including students, employers, funders and policy makers, are demanding a better understanding of what is gained by spending (ever more) money on education.

Simply put, many people want to know: What is my return-on-investment if I choose education? What can I obtain here that I can't obtain elsewhere?

Universities need to confront this contemporary approach, especially in a world where students can learn complex, practical and lucrative skills at a comprehensive, work-ready level through ad hoc and often self-directed learning opportunities online, at home or in the field — and in a world where employers can find these skilled persons outside of the university. As the G20 Employment Working Group reports (OECD, 2016), “the flexibility and incentives of education and training systems and stakeholders need to be

enhanced to respond more promptly to emerging skill needs” (p. 3).

Considering employability thus enables universities to both think about and articulate ways in which the university nurtures distinct skills, experiences and attributes that are valued in the job market and difficult to attain elsewhere. In this way, considering employability helps universities devise ways to integrate especially useful and transferable skills and attributes throughout the educational pathways offered to students.

Similarly, considering employability helps universities demonstrate that they care about their students’ long-term personal, professional and financial success, by helping to make their degrees more valued by employers. Moreover, “employability can also enhance student engagement and motivation, which can lead to better results and improved institutional rankings and reputation” (COL, 2019).

Likewise, employers and policy makers value universities that forefront employability, because

the attributes contained within employability are broadly transferable within and among work opportunities and because the skill sets contained in employability are often sourced, in part, from the needs of the workforce as a whole. This helps reassure employers that graduates are ready for the needs of the real-life work world. In a recent McKinsey survey, “[s]ixty percent [of

employers surveyed] said that new graduates were not adequately prepared for the world of work. There were gaps in technical skills such as STEM subject degrees, but also soft skills such as communication, teamwork, and punctuality” (McKinsey, 2017).

Considering employability allows universities to:

- Strategically articulate the skills and experiences developed as a result of a tertiary education
- Work collaboratively with diverse stakeholders to better understand the needs of the workforce, economy and community
- Demonstrate interest in their students’ long-term personal, professional and financial success
- Better understand how students’ coursework and experiences transfer into the workforce
- Improve student engagement and motivation

## 1.4 Why Employability Should Be Part of a Student’s Academic Journey

Employability assesses the readiness of students to enter the workforce in both meaningful and practical ways. It also demonstrates how well institutions are preparing students to move from the theoretical landscape of the university to the practical arena of work. For employers, governments and community members, employability also signals the potential of graduates to stimulate opportunities, both economic and social, through the application of adaptive, innovative and current skill sets and mindsets, developed in part during a student’s course of study.

In many ways, employability — when well developed — is also an indicator of strategic collaboration between employers, universities and governments, wherein the evolving needs and values of each sector are thoughtfully considered and integrated into educational programming.

Thus, developing and assessing the employability of students helps diverse stakeholders better understand: *What are we, as collaborators, getting back for investing — financially or in kind — in a region’s institution(s) of higher education and their students?*

**“In the current context, leaving individuals ‘without’ employability would considerably diminish their life chances, and therefore, there are moral obligations to support others’ pursuit of it. In addition, attributes of employability can enhance an individual’s productivity in the workplace and thereby provide benefits for society.” (McCowan, 2015, p. 272)**

## **1.5 The Impact of Employability on Employers, Communities and Governments**

Employers, communities and governments should consider the employability of students because ultimately, the students of today are the workers, innovators and leaders of tomorrow. Equipped with the right toolkit of skills, experiences and attributes, graduates have the potential to transform communities, economies and countries, in collaboration with preceding and succeeding generations. Unfortunately, many of these desired changes remain delayed because of mismatches between skills and opportunities.

Across countries, “large shares of employers complain they cannot find workers with the skills their businesses require. . . . [A] number of college graduates face difficulties finding job opportunities matching their

qualifications and their competences and many lower skilled workers find increased competition for employment” (OECD, 2016, p. 6–7). This incongruence between stakeholders is problematic because it stifles innovation and development and can cause tension among social groups, especially in the labour market. Moreover, skill imbalances and employment shortages are often defining factors in policy decisions that affect areas such as immigration, investment and “brain drain.” Thus, since “skills challenges are common across several policy domains,” employers, communities and governments should have a vested interest in “developing a systematic and comprehensive policy response to imbalances” (OECD, 2016, p. 11).

**“Skills imbalances can be costly: for instance, skill shortages can constrain the ability of firms to innovate and adopt new technologies, while skill mismatches reduce labour productivity due to the misallocation of workers to jobs. Individuals are also affected as skills mismatch can bring about a higher risk of unemployment, lower wages, lower job satisfaction and poorer career prospects.” (OECD, 2016, p. 7)**

In other words, employers, communities and governments should feel empowered to work with universities to identify and develop the competencies and skills needed to help drive the goals of a region on a long-term basis. As Clarke (2018) suggests:

perhaps the time has come for a meaningful discussion between universities and employer groups. . . . [T]here may need to be an open debate about what it means to be work-ready in diverse contexts as well as

discussions about the role of employers in building on-going graduate employability. . . . [G]overnments, employers and universities may need to engage in discussions around supply and demand for specific degree programmes in order to better manage the number of students entering disciplines already experiencing market saturation. (p. 1933)

Considering employability allows employers, communities and governments to:

- Improve and anticipate potential skill imbalances and employment gaps
- Help find skilful workers locally
- Engage with a workforce that is able to adjust to dynamic changes through skill transferability and positive mindsets
- Improve local development, the local economy and community engagement

## 1.6 The Impact of Employability on Students

Although universities are dynamic spaces for personal development and intellectual exploration, we live in a world where gainful employment is often paramount to a person's overall well-being. Thus, for many students, university is not only a place for development but also a pathway to greater career and financial opportunities for themselves, for their families and for their communities.

Higher education is also expensive. Students spend significant sums of money, time and energy on education, and increasingly, they want reassurance about how their learning will be useful outside of an academic setting. Consequently, for many students, the pursuit of education involves a cost–benefit analysis.

“Employability . . . becomes the obligation of individuals in the contemporary economic landscape to ensure their own employment, income and survival. Individuals must equip themselves with the attributes necessary to respond to a rapidly changing employment market to enable themselves to maintain work and transfer between jobs” (McCowan, 2015, p. 271).

Accordingly, students are interested in understanding how their investment(s) will pay off — not only in intellectual and social capital but also in ways that help reduce debt, promote stable incomes and provide professional and personal fulfilment long after they have left the classroom.

Thus, students should consider how their universities are developing their employability, because employability is strongly correlated with an increased likelihood of long-term professional and personal success. Notably, the attributes of employability are generally transferable and highly valued, despite changes in workforce needs. In this way, universities that meaningfully consider their students' employability demonstrate a concerted effort to help students transition to life after university. This adds long-term value to tertiary education.

Perhaps even more importantly, developing student employability requires universities to provide students with stimulating and unique learning opportunities, both in the curriculum and outside the classroom. This means that universities who foreground employability often have vibrant learning environments, opportunities and curricula, which make learning more fun for students!

Considering employability allows students to:

- Think about how their education can contribute to long-term professional success
- Acknowledge the importance of employability
- Engage in dynamic learning opportunities
- Acquire useful skills, competencies and attributes that are transferable and valued in the long term
- Visualise how their education may pay off

## 1.7 Some Current Employability Attributes

Although a good employability strategy requires consideration of specific contextual skills and attributes, many employability attributes are rather generic and can be developed in numerous ways. Although these attributes may at first seem unremarkable, their genericness is in fact what makes them valuable because students with these

skills, mindsets and attitudes are able to deal with challenges and adapt to new environments quickly and effectively. Moreover, students with these generic attributes are better able to apply their skills in diverse contexts and find ways to innovate using interdisciplinary thinking.

Communication Skills	Ability to Learn	Specialised or Discipline-Specific Knowledge
Self-Motivation	Resilience and Growth Mindset	Diverse Experiences
Numeracy	Transferability of Skills	Interdisciplinary Thinking
Ability to Work Under Pressure	Willingness to Try New Things	Technical Skills
Adaptability	Interpersonal Skills	Ability to Value Diversity and Difference
Ability to Articulate Knowledge and Skills	Systems Thinking	Teamwork





## Phase 1

### Assessment and Sensitisation

**Employability Capacity-Building Workshop**  
(with institutional management and staff)

**Establish Employability Committee or Taskforce**

**Employability Scorecard Workshop**  
(with institutional management and staff)



## Phase 2

### Planning



#### COL Support

#### Develop Employability Strategy

Workshop with Employability Committee or Taskforce  
(consultant facilitated)



#### Tools and Resources

Employability resource portal



## Phase 3

### Implementation

#### Implement the Strategy

Examples:

- Graduate attributes mapping
- Soft skills courses
- Graduate tracer studies

Continuous Improvement



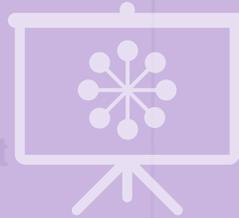


Phase 4

Evaluation, Reflection  
and Planning

Individual student  
attributes/attitudes

Improved  
graduate  
employment  
and  
entrepreneurship



Improved graduate  
employability

# The Commonwealth of Learning's Employability Model

Improved  
university  
reputation

Labour Market

## 2.0 The Commonwealth of Learning’s Employability Model

COL’s Employability Model (2019), shown in Figure 2, has been specifically designed to enable institutions — especially those with minimal employability strategies — to explore diverse ways to assess, develop, implement and evaluate employability within their home context. COL’s model is enacted through four cyclical processes: (1) Assessment and Sensitisation, (2) Planning,

(3) Implementation and (4) Evaluation, Reflection and Planning. This cyclical approach allows institutions to comprehensively examine the facets needed to develop employability well, with special consideration for the diverse, and often disparate, needs of different institutions and regions.

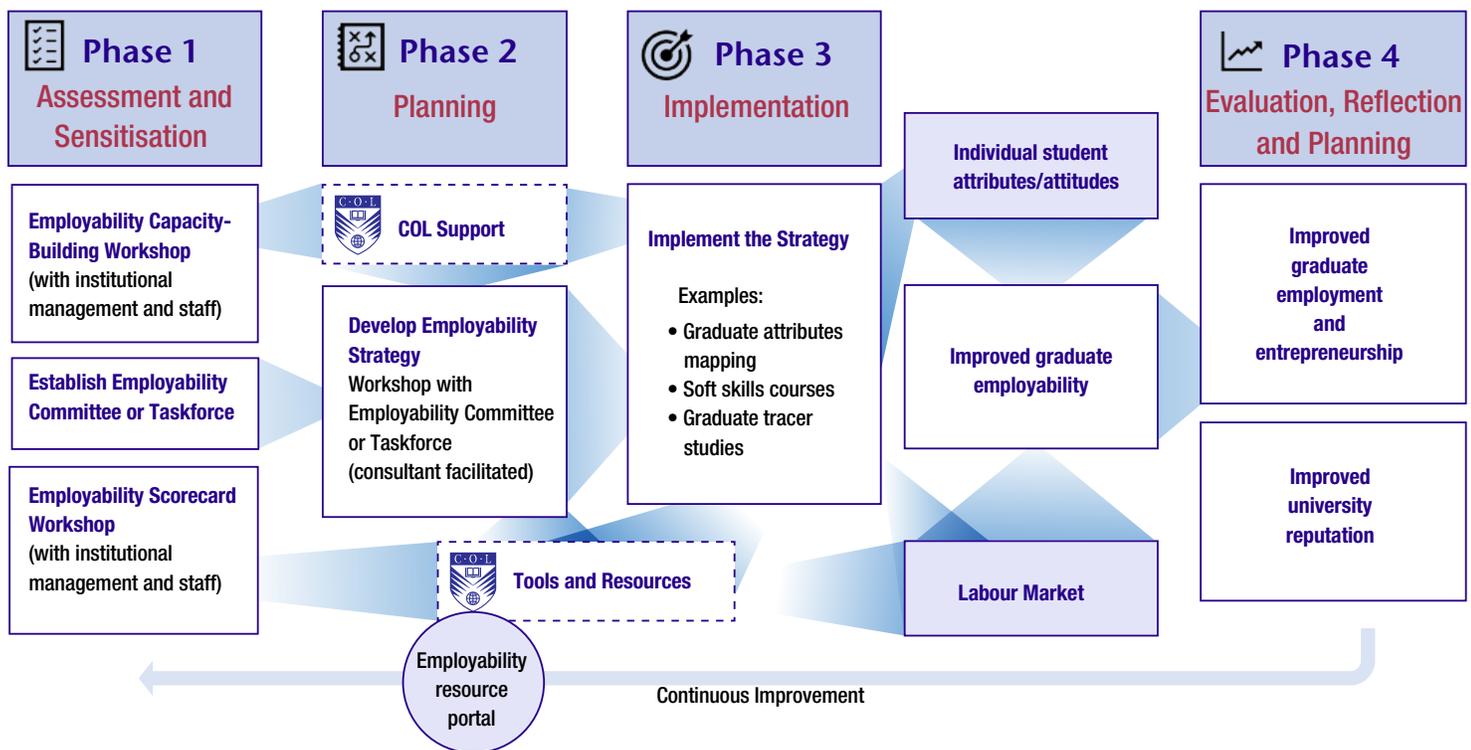


Figure 2. COL’S Employability Model for higher education institutions

Further, COL’s Employability Model asks universities to assess how employability is developed at their universities, through a phased consideration of the students’ needs year by year. This is because employability is built over time, throughout a student’s journey in higher education. Consequently, COL asks institutions to focus on a different mandate for every year

(stage) of a student’s education, from registration to graduation. In the journey map shown in Figure 3, Okafor (2018) outlines these steps as before induction, after induction, penultimate year of study, and upon graduation.

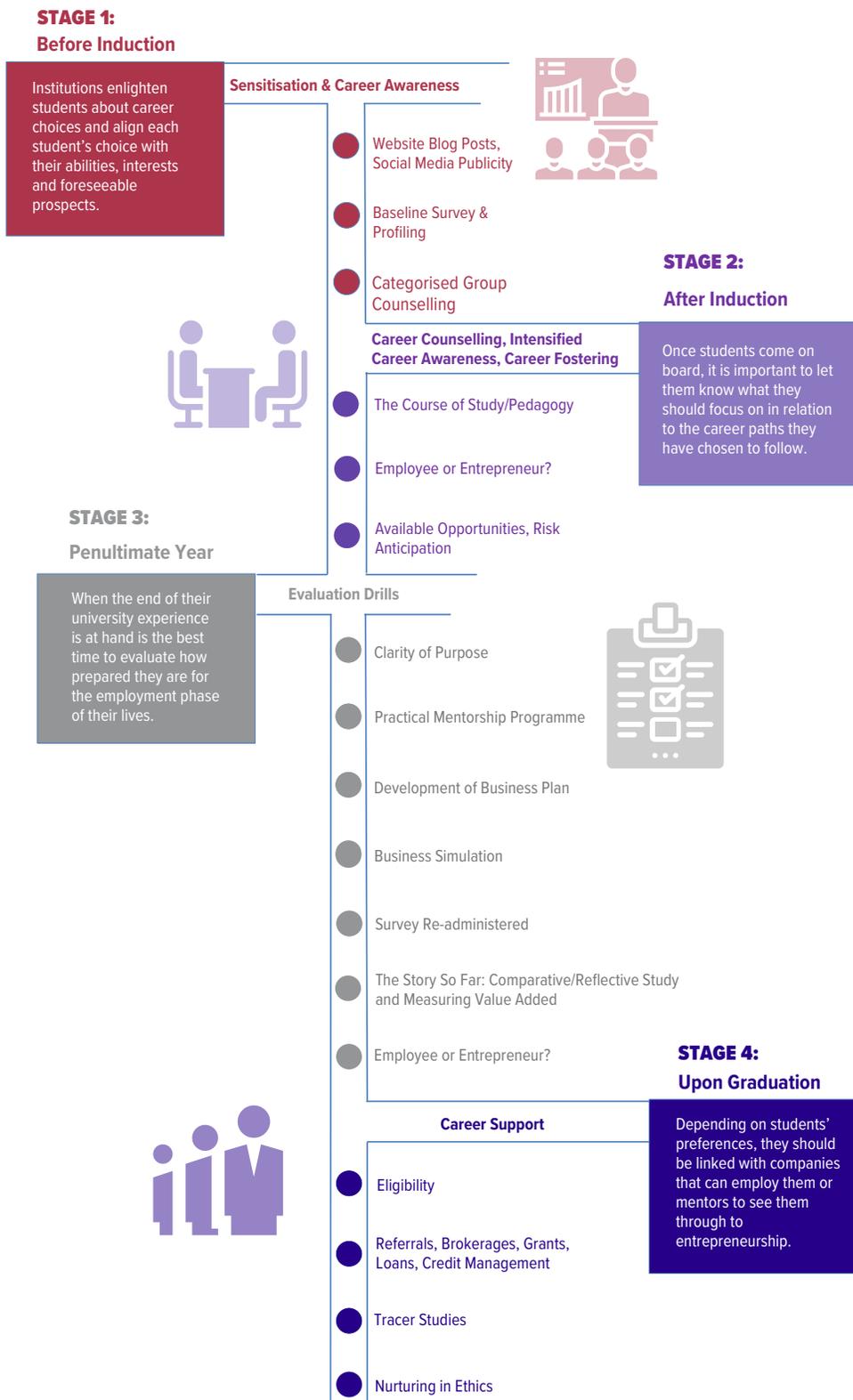


Figure 3.0: Employability Journey Mapping Model

Fundamental to COL's Employability Model is the need for tools and strategies to be specifically contextualised to deeply reflect the realities of an institution's context, both social and institutional.

With this in mind, the examples and templates provided are intended to generate thinking but are not designed to be used verbatim.

Comparing to Site



**Site Usage**

- 7,649 Visits
- 25,423 Pageviews
- 3.32 Pages/Visit
- 43.64% Bounce Rate
- 00:04:08 Avg. Time on Site
- 28.30% % New Visits

**Traffic Sources Overview**



**Map Overlay**



**Visitors Overview**



Visitors  
2,958

**Content Overview**

Pages	Pageviews	% Pageviews
/	5,932	23.33%
/information-resources	1,306	5.14%
/decisions	867	3.41%
/information-privacy	697	2.74%
/information-privacy-guidelines	692	2.72%



Visits

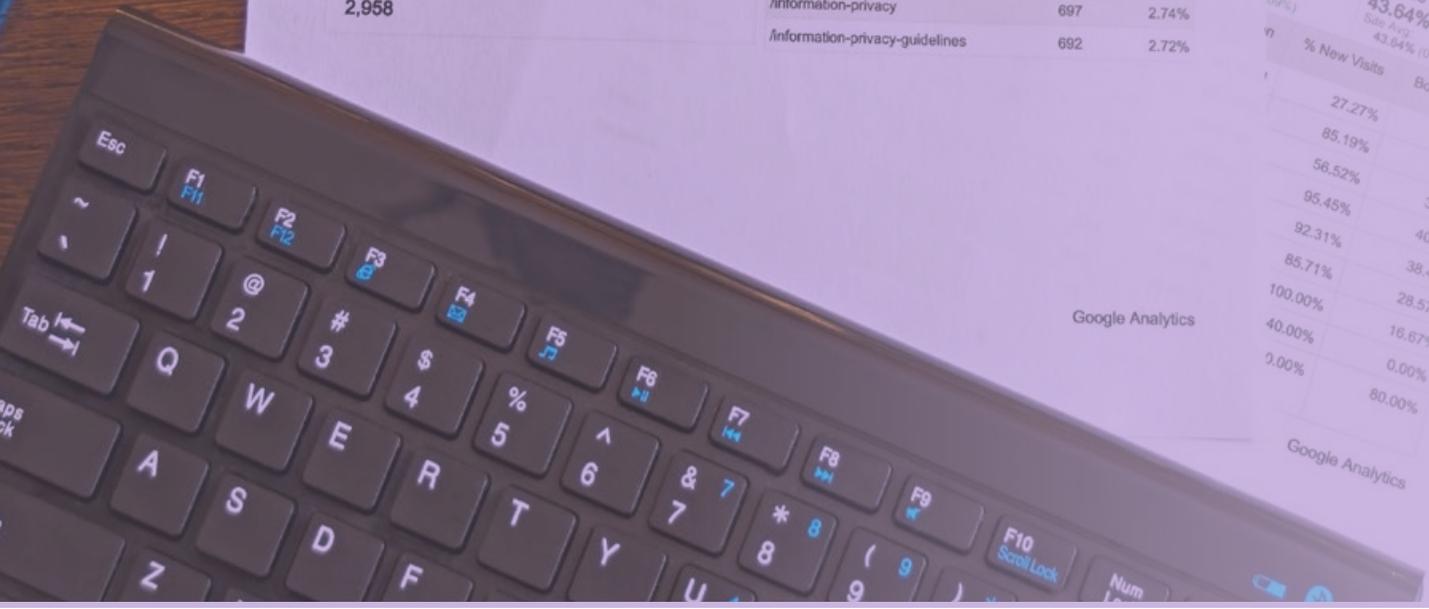
Bounce Rate  
43.64%

Sub Avg. 43.64% (0.00%)

% New Visits	Bounce Rate
27.27%	43.55%
85.19%	74.07%
56.52%	39.13%
95.45%	40.91%
92.31%	38.46%
85.71%	28.57%
100.00%	16.67%
40.00%	0.00%
0.00%	80.00%

Google Analytics

Google Analytics



18, 2010  
ing to 2010



# **Institutional Employability Scorecard**

## 3.0 Phase 1: Assessment and Sensitisation

### 3.1 Introduction

Phase 1 of COL's Employability Model asks institutions to focus on two strategic areas: assessment and capacity building. In this phase, specific activities enable participants to better understand the state of employability at their institution and to jumpstart the institution's capacity to engage with employability strategies, with buy-in from key management, staff and the labour market. This initial phase requires teams to consider: *Who are the key stakeholders I need to*

*bring to the table to make employability a success at my institution?* Consider bringing in team members from diverse facets of the university, including faculty from different disciplines, staff, management and students, as well as key partners from the community, such as employers, professional bodies, human resource associations and community leaders. It all begins with an assessment of the employability readiness of the institution in different phases of a student's life.

### 3.2 Method: Using COL's Institutional Employability Readiness Scorecard

COL's Institutional Employability Readiness Scorecard is a comprehensive assessment of how well an institution is developing the employability of its students year by year, over the course of a student's journey through university.

The scorecard highlights four strategic areas commonly used to develop employability among university students, and it further categorises by year of study those strategies most relevant to a student's overall development. The four strategic areas of the scorecard are: (1) Career Awareness, (2) Focused Career and Skill Development, (3) Practical Skill and Career Experience and (4/5) Transitional Skills.

The scorecard asks universities to assess 25 criteria. The criteria consider tools, services and resources known to help enhance or develop the employability of students. The score is then used to determine the strengths and weaknesses of an institution in terms of student employability development. When used regularly, through annual evaluation, the scorecard can help institutions note improvements, zero in on urgent areas for improvement and help further develop programming and resources.

In its unaltered form, the following rubric is used to assess an institution's score:

**0–38 points (0–49%) = *Employability Not Met.*** The institution under assessment does not have the minimum resources to provide or implement employability services needed OR the employability services already provided are of poor quality.

**39–54 points (50–69%) = *Employability Partially Met.*** The institution under assessment has the minimum resources to provide or implement employability

services OR the employability services provided have average quality and have exhibited the potential to further improve.

**55–79 points (70–100%) = *Employability Fully Met*.** The institution under assessment has all the resources to provide or implement employability services OR the services already provided are of good to excellent quality.

**Table 1: COL's Institutional Employability Scorecard Template**

Indicators	Obtainable Score	Actual Score	Remarks
<b>Stage 1 – Year 1: Sensitisation and Career Awareness Stage</b>			
Baseline survey	3		
Categorised counselling	3		
Career awareness methods	3		
Pedagogy allows for opportunity to explore different disciplines in the first years	3		
<b>TOTAL</b>	<b>12</b>		
<b>Stage 2 – Year 2: Career Counselling, Intensified Career Awareness, Career Fostering</b>			
SWOT analysis of career prospects for different groups of students	3		
“Junior” career fair	3		
Vocational training	3		
Assessment surveys	3		
Partnership with firms for internship placements	3		
Seminars and conferences with industry experts as speakers	3		
A suitable pedagogy reflecting 21 <sup>st</sup> -century hard and soft skills	3		
A pedagogy reflecting an entrepreneurial/ business/vocational/employability course track	3		
<b>TOTAL</b>	<b>24</b>		

<b>Stage 3 – Year 3: Evaluation Drills</b>			
Practical mentorship programme	3		
Industrial placement	3		
Development of business plans	3		
Business simulations	3		
Functional and practical subject-based skills	5		
Functional and practical generic skills	5		
<b>TOTAL</b>	<b>22</b>		
<b>Stage 4/5 – Final Years: Career Support Pre/Post Graduation</b>			
Final year entrepreneurial presentations/ business pitch	3		
Mechanism in place to track students' progress at least one year after graduation	3		
Nurturing in ethics	3		
Brokerage by the institutions	3		
Provision of access to grants, loans	3		
Credit management orientation	3		
Survey re-administered	3		
<b>TOTAL</b>	<b>21</b>		
<b>TOTAL</b>	<b>79</b>		

Although COL's recommended criteria are useful — and may indeed match the ideas of your university precisely — it is okay to make some changes to the scorecard to better match institutional needs and opportunities.

COL's preliminary criteria are intentionally broad in scope and language because there are no “one-size-fits-all” resources or initiatives that make sense for all universities. Instead, the scorecard is designed to help *guide* teams towards a *phased* approach to employability, rather than prescribe specific interventions or initiatives. It may be

useful to think of the criteria as categories from which your team can begin to brainstorm diverse, context-specific ideas and strategies to help students achieve employability skills and attributes in each phase.

In short, feel free to change the *criteria and scoring*, but continue to use the phased approach. Keep in mind the specific focus of each stage: (1) Career Awareness, (2) Focused Career and Skill Development, (3) Practical Skill and Career Experience and (4/5) Transitional Skills.

### 3.3 Open University of Mauritius Employability Readiness Scorecard

The Open University of Mauritius (OUM) adapted the scorecard to better match the needs of their specific institution and the open

university model overall. In doing so, they removed certain elements from the scorecard and added others, as per the four stages in Figure 4.0.

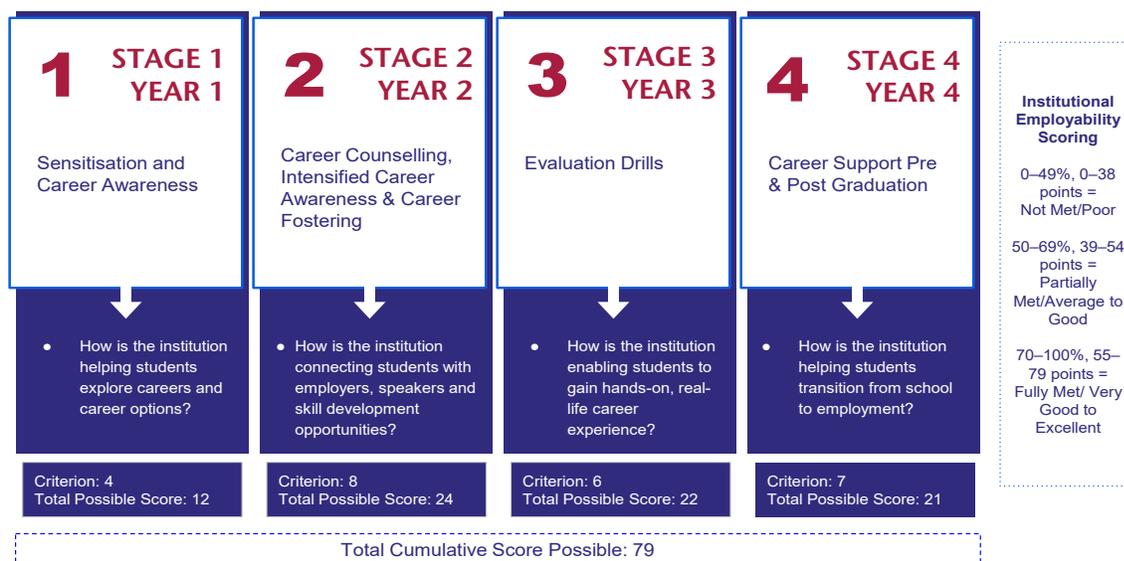


Figure 4.0. The four stages of the employability journey

Of this process, OUM writes: “One might argue that there are some items in the scoring matrix which are not relevant or applicable to OUM given its inherent specific characteristics. In this respect, the model has been re-worked with items which might not be applicable such as loans, credit orientation management, industry

placement etc. being deleted from the model” (Sannasee et al., 2019).

As an example of adaptation and illustration, one sub-component of the OUM scorecard is presented as Table 2 (Soobadar, 2019).

Table 2: Excerpt from the Open University of Mauritius' scorecard to identify strengths and weaknesses

Item	Standard	Total Obtainable Score	Minimum Obtainable Score	Actual Score	Remarks
<b>Stage 1 – Year 1: Sensitisation and Career Awareness Stage</b>					
1	Baseline survey (induction sessions)	3	1.5	1	No surveys
2	Categorised counselling	3	1.5	2	Induction sessions prior to the intake of new students (either Jan. or Aug. at OU)
3	Career awareness methods	3	1.5	1	↔ No website blogs/ discussion forums and no workshops on career awareness
4	Pedagogy allows for opportunity to explore different disciplines in the first year	3	1.5	1	↔ No interdisciplinary modules in year 1 programmes
	<b>SUBTOTAL, Stage 1</b>	<b>12</b>	<b>6</b>	<b>5</b>	

### Stage 1 – Year 1: Sensitisation and Career Awareness

#### Main remarks and findings: Stage 1

The university holds two induction sessions every year for new students to gather information on courses on offer for the new academic year. These induction sessions are held prior to the January/August intake. In addition, the students have the opportunity to interact with academic staff and discuss possible career prospects for the different programmes on offer. However, once the students are enrolled, there are no formal workshops being conducted for first-year students on career awareness. In addition, there are no formal surveys to track the professional goals of these students.

### 3.4 Using the Scorecard to Identify Strengths and Weaknesses

While an institution’s cumulative score is an important snapshot of the overall effectiveness of a university’s current employability resources, services and initiatives, the most important — and strategic — information for how to improve employability is contained within the subtotals of each stage.

To improve effectively *and* efficiently, universities may wish to focus on improving the sections with the lowest scores first. Moreover, since employability is developed over time, it may also be beneficial for teams to make note of

which areas are the weakest in *each stage* of student development. Ideally, universities will zero in on the weakest stage first but will also simultaneously work to improve the weakest criteria in other stages, in priority sequence. In this way, teams are strengthening student employability overall.

Additionally, areas with strong scores should be monitored to ensure they continue providing quality programming, and new ideas should be trialled and explored to ensure continual improvement.

### References and Resources

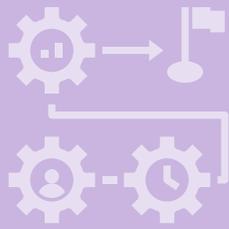
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# Employability Strategy

## 4.0 Phase 2: Planning

### 4.1 Introducing the Institutional Employability Strategy

An institution-wide employability strategy is a necessary framework for ensuring student employability is developed across university experiences and faculties. It requires buy-in from staff, faculty and management as well as continued commitment to evaluation, planning and improvement from teams. Thus, as you work towards developing an institution-wide employability strategy, it is beneficial to ensure your employability working group or committee is composed of, or has the support of, key stakeholders from diverse segments of the university community as well as external stakeholders.

It is also helpful to keep in mind that the employability of students is developed over time, throughout a student's university journey and

beyond. Accordingly, employability strategies must consider the needs of students in every year of their academic progress and be reviewed on a regular basis.

In brief, employability strategies should be cyclical and include the time and flexibility to continually improve programming through information gleaned from annual assessments.

This section attempts to illustrate in very simple structures the process of developing an employability strategy. It recognises the significant roles that students, faculty, employers and industry — including professional bodies — play and can play in facilitating the success of any employability strategy.

### 4.2 Method: Developing an Institutional Employability Strategy

Universities may be at different levels of employability strategy development. Some may not have developed one, while others could be in the process of development or implementing. It is good to realise that the employability strategy

is not a standalone plan but an approach within the overall strategic plan of the university. The variation is a focus outward on clients rather than inward on students.

#### 4.2.1 Starting with the Scorecard

The scorecard is a tool that enables you to quickly gain a holistic picture of employability development at your institution. Not only does it provide a snapshot of how well employability is being developed at an institution overall, but it also demonstrates the key initiatives and resources that can be developed or improved for

students to enhance their employability in every year of their academic journey.

Thus, before developing an institution-wide employability strategy, it is imperative for teams to carefully analyse the information gathered from the employability scorecard and

from any previous activities/studies related to employability.

Whatever level your institution is at, your approach will have four phases: (i) discussion and reflection to define a shared view; (ii) review/mapping of activities — scanning

the environment to determine what is or is not being done, which includes activities by stakeholders; (iii) action planning — addressing gaps and enhancing employability practices; and (iv) evaluation to determine the successes or otherwise of the implementation and make adjustments.

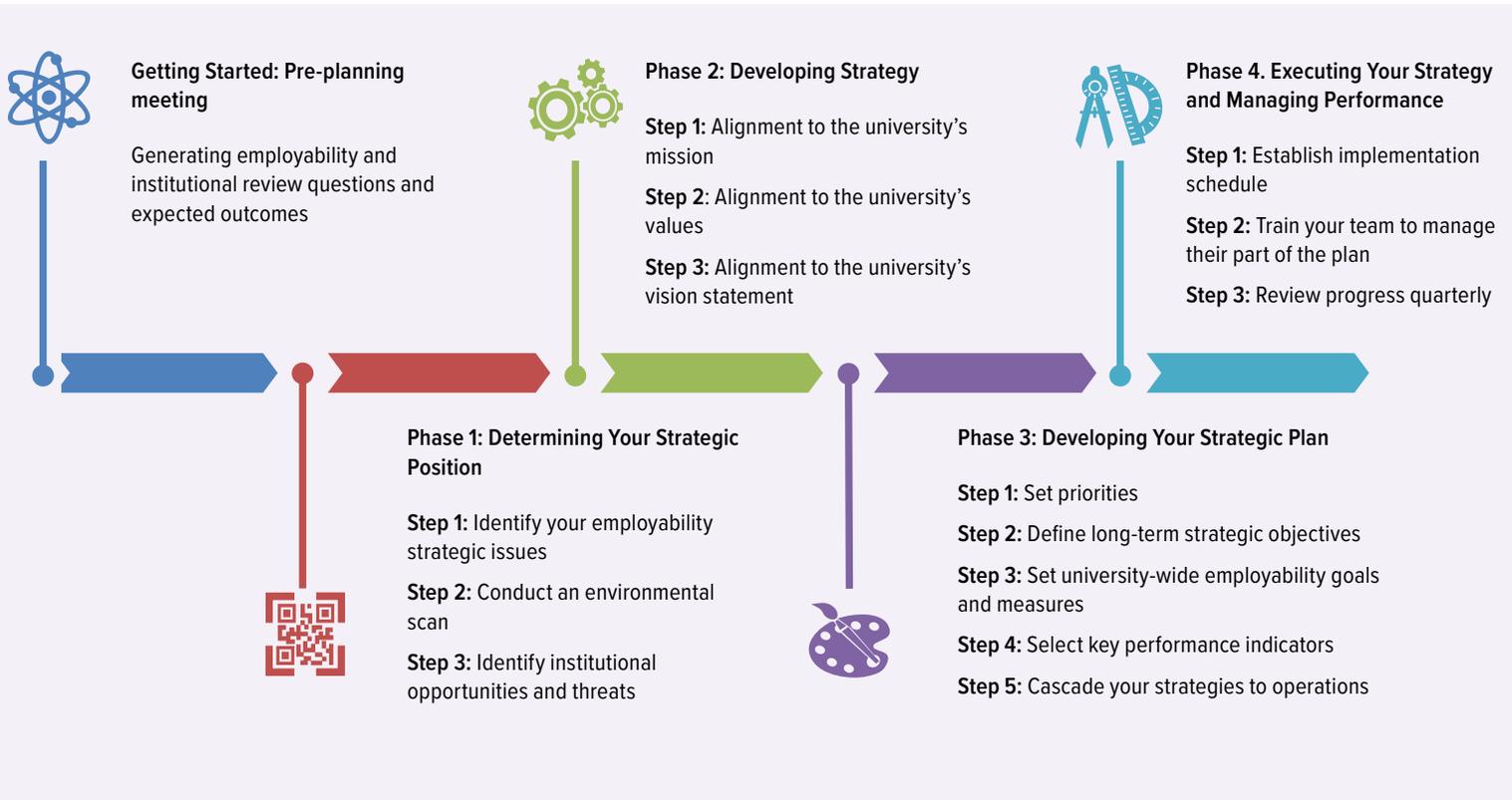


Figure 5. Stages of developing an employability strategy

### 4.2.2 Pre-planning Meeting

At this point in time, the university has already completed/received the employability scorecard. Having decided to act on it, the university now requires a plan of action. After assessing the information provided by the scorecard, set a timeline for when improvements will be implemented in these priority areas, on a rolling basis. Although these areas do not in and of themselves compose the strategic plan, they

should be given priority in implementation. Since you cannot do everything at once, consider what are the most urgent needs for your students and institution.

A formal pre-planning schedule will be needed. Table 3 indicates the objectives and expected outcomes of the pre-planning scheduling session.

**Table 3. Pre-planning schedule: review questions and expected outcomes**

	Review Questions		Expected Outcomes
1	What is the composition of the planning team?	1	Planning team members are informed of their roles and responsibilities.
2	Who is the process owner?	2	Planning schedule is established.
3	After one academic year, what should have changed as a result of this initiative?	3	Existing planning information and secondary data are collected.
4	How should employability be addressed: through the curriculum, co-curricular activities, extra-curricular activities or all of these?	4	An approach is identified and agreed upon.

## 4.3 Developing Your Employability Strategy

An employability plan should seamlessly fit in the overall university strategic plan. A three-phase employability strategy development is described here: (i) Phase 1: Determining Your Strategic Position, (ii) Phase 2: Developing Your

Strategy, (iii) Phase 3: Developing Your Strategic Plan. These phases are depicted in Figure 3. Each phase has a set of review questions, expected outputs and an activity matrix for the planning team.

### 4.3.1 Phase 1: Determining Your Strategic Position

In this phase, you will undertake five key steps: (i) identifying employability strategic issues, (ii) conducting an environmental scan, (iii) identifying opportunities and threats, (iv)

identifying strengths and weaknesses and (v) establishing employer/industry segments and requirements.

#### Step 1: Identifying Strategic Issues

Strategic issues are critical unknowns driving the university to embark on this employability strategy. These issues include but are not limited to: lack of employment opportunities for your graduates; the limited impact of graduates on society; market shifts; or anything else keeping your graduates out of employment or self-employment. These require a solution or decision.

Think carefully about the needs of students in each year of their academic programme at your institution. Keep in mind the four areas of

focus for each year, in terms of employability development: (1) Assessment and Sensitisation, (2) Planning, (3) Implementation and (4) Evaluation, Reflection and Planning. What resources, programmes or initiatives are needed to ensure students have access to programming that will improve their employability year by year?

As you think about this question, it may be useful to make an inventory of programming that is currently available and resources that will need to be created.

Review Questions	
1	What skills are necessary for our graduates to secure lifelong employability?
2	How will we diversify our programmes to take advantage of technology?
3	What must we do to improve our market presence and stay competitive?
4	How and where must we engage in programme innovation to have an impact in our society?

## Step 2: Conduct an Environmental Scan

Conduct an environmental scan to help you understand your operating environment. The issues to be reviewed include political, economic, social, technological, ecological and legal trends. Each of these plays a part in determining the overall employability environment.

Review Questions	
1	How well do our programmes respond to the political, economic, social, technological, ecological and legal trends in our country?
2	What will be the situation in three years?
3	How do our graduates fit in this environment?
4	How well do our graduates compete internationally?
5	How can we engage with professional bodies to inform disciplinary-oriented practices?

## Step 3: Identify Opportunities and Threats

Within the environmental scan, identify the opportunities that abound for the university's strategy and the threats to its implementation and success.

Review Questions	
	<b>Opportunities:</b> <i>What do you want to capitalise on?</i>
1	What new needs of employers/industry could you meet?
2	What economic trends benefit the university?
3	What are the emerging political and social opportunities?
4	What niches have your competitors missed?

	<b>Threats:</b> <i>What do you need to mitigate?</i>
1	What are the negative economic trends?
2	What are the negative political and social trends?
3	Where are competitors more effective?
4	Where are you vulnerable?

#### Step 4: Identify Strengths and Weaknesses

Still within the environmental scan, identify the university's strengths and weaknesses.

Review Questions	
	<b>Strengths:</b> <i>What do you want to build on?</i>
1	What do you do well (curricula, co-curricular activities, extracurricular activities, operations, management)?
2	What are your core competencies?
3	What differentiates you from other universities?
4	Why do employers/industry prefer your graduates?
	<b>Weaknesses:</b> <i>What do you need to improve?</i>
1	Where do you lack resources?
2	What can you do better?
3	Where are you losing touch with industry ?
4	In what areas do your competitors have an edge?

## Step 5: Establish Employer/Industry Segments and Requirements

Employer segmentation defines the different economic segments the university aims to link with its graduates. Consider: Who are you providing value to?

Review Questions	
1	What needs or wants define your typical employer/industry segments?
2	What characteristics describe your typical employer/industry segments?
3	Can you sort employer/industry segments into different profiles according to their needs, wants and characteristics?
4	How can you reach each segment?
5	How can work-based and work-related learning activities enhance your graduates' employability?

### Action Matrix

Action	Responsibility	Tools & Techniques
Scan the macro and micro trends in your environment and industry	Planning team, entrepreneurs and industry	Environmental scan worksheet
Identify needs and competitive opportunities and threats for the university's programmes	Planning team	National/industry employment reports
Clarify target needs and your value proposition	Marketing team	Traceability study reports
Gather and review staff, student, faculty and partner feedback to determine strengths and weaknesses	All staff	Employee survey/feedback and national/industry employment reports as well as traceability reports
Develop a SWOT analysis	Planning team	SWOT worksheet, positioning map, opportunity analysis

### 4.3.2 Phase 2: Developing Strategy

In this phase, you will undertake five key steps: (i) Step 1: alignment to your mission; (ii) Step 2: alignment to your values; (iii) Step 3: alignment

to your vision statement; (iv) Step 4: recognition of your competitive advantages; and (v) Step 5: establishing your organisation-wide strategies.

**Step 1: Alignment to Your Mission: What is our purpose? Why do we exist? What do we do?**

Review Questions:	
1	What does your university intend to accomplish in terms of employability?
2	What drives your staff and faculty towards employability?
Outcome: A short, concise, concrete statement that clearly defines the scope of the organisation.	

**Step 2: Alignment to Your Values: What are your values and beliefs? What does your organisation stand for?**

Review Questions	
1	What are the key non-negotiable areas critical to the success of the university as it develops this strategy?
2	What are the guiding principles that are core to how people operate?
3	What characteristics do you expect to see?
Outcome: A short list of core values.	

**Step 3: Alignment to Your Vision Statement: What is the desired future state and direction of the university?**

Review Questions	
1	What will our organisation look like five to ten years from now?
2	What does success in employability look like?
3	What are we aspiring to achieve?
4	What challenges are we addressing and why?
Outcome: A picture of the future.	

**Step 4: Recognition of your Competitive Advantages: What are we best at?**

Review Questions	
1	What are your unique strengths?

2	What are you best at in the economic segments/industry you serve or aim to serve?
3	Do employers/industry still value your graduates?
4	How do your value propositions stand out to employers and industry?
Outcome: A list of items that honestly express the university's foundation for success.	

### Step 5: Establishing Your Organisation-Wide Strategies: How will we succeed?

Review Questions	
1	<p>Is your market (industry target) broad or narrow?</p> <p>Broad: a relatively wide market emphasis.</p> <p>Narrow: limited to only one or a few segments in the market.</p>
2	Does your competitive position focus on lowest total cost or product/service differentiation or both?
Outcome: Establish the general, umbrella methods you intend to use to reach your vision.	



### 4.3.3 Phase 3: Strategic Plan Development

In this phase, you review the strategic plan development through five steps: (i) Step 1: set priorities; (ii) Step 2: define long-term strategic objectives; (iii) Step 3: set university-wide

employability goals and measures; (iv) Step 4: select key performance indicators (KPIs); and (v) Step 5: cascade your strategies to operations.

#### Step 1: Set priorities

Evaluate the strategic options generated, and identify what will give the greatest benefit and best achieve the university’s employability mission. Use the SWOT matrix provided below.

	External Opportunities	External Threats
Internal Strengths	Advantage strategies to maximise opportunities	Protective strategies to minimise threats
Internal Weaknesses	Conversion strategies to minimise weaknesses	Defensive strategies to minimise weaknesses and avoid threats

#### Step 2: Define Long-Term Strategic Objectives

Review Questions	
1	What are our stakeholders’ expectations for our skills development and social outcomes?
2	To reach our outcomes, what value must we provide to employers /industry and graduates? What is our value proposition?
3	To provide value, what processes must we excel at to deliver skilled and employable graduates?
4	To drive our processes, what skills, capabilities and organisational structure must we have?
Outcome: Framework for your plan.	

#### Step 3: Set university-wide employability goals and measures

Organisation-wide employability goals and measures are annual statements that are specific, measurable, attainable and time bound. These are outcome statements expressing expected results

and specific performance targets. They should address what the institution needs to do in the short term.

Review Question	
1	What is most important right now to reach our long-term objectives?
Outcome: Clear outcomes for the current year.	

#### Step 4: Select key performance indicators

KPIs are indicators that show how goals are being reached.

Review Questions	
1	What are the key performance measures that must be tracked to monitor whether goals are being achieved?
2	How will we measure our success?
Outcome: Measures that help you monitor your performance.	

#### Step 5: Cascade your strategies to operations

In this step, you translate strategy from the organisational level to the individual staff/faculty level, aligning resources and actions to drive the university's vision. Departmental heads as well as individual staff and faculty develop

their short-term goals and action plans to support the university employability direction. Develop a set of plans that cascade directly from the strategic plan, or sync existing operational plans with organisational goals.

Review Questions	
1	How are we going to get there at a functional level?
2	Who must do what by when to accomplish and drive the organisational employability goals?
3	What strategic questions still remain and need to be solved?
Outcome: Department/faculty goals, actions, measures and targets for the next one to two years.	

## 4.4 Examples of Employability Strategies

The following sections present an employability strategy developed by the Open University of

Mauritius and an operational plan created by the University of St. Andrews, in the UK.

### 4.4.1 The Open University of Mauritius

Using the insights gathered from their scorecard, OUM used the following template to highlight how they would improve specific aspects of programming and resources to better support

students at each stage of their academic journey. The employability strategy developed by OUM is provided here as an example of how a strategy can be implemented (Soobadar, 2019).

#### Year 1 – Stage 1: Strategy During Induction: Sensitisation and Career Awareness

<b>Key Objective:</b> Provide key information to prospective students for them to understand and make informed decisions about their career prospects.		
Objectives/Actions	Responsible Parties	Time Frame for Implementation
To provide a clear journey map for each programme to help students better understand available opportunities supporting their personal and professional development during the induction session.	Head of Department	Medium Term
To provide details online about the type of potential employment opportunities for graduates of the programmes.	Academic Staff	Medium Term
To include details on the employability skills that a student will gain from each programme.	Programme Manager	Short Term
To highlight employability and use successful alumni profiles during the induction session and through the university's website.	Marketing Department	Short Term

#### Year 2 – Stage 2: Strategy after Induction: Enhancing Career Development, Awareness and Prospects During Programme of Study

<b>Key Objective:</b> To enhance career development, awareness and prospects during the programme of study		
Objectives/Actions	Responsible Parties	Time Frame for Implementation
To integrate issues relevant to career awareness and prospects in the student feedback questionnaire.	Head of Department, Quality Assurance Office, Programme Manager	Short Term

To organise junior career fairs on a semi-annual basis on campus.	Head of Department Academic Staff Marketing Department	Medium Term
To partner with firms to ensure internship opportunities for full-time students.	Head of Department Academic Staff Programme Manager	Medium Term
To organise seminars and conferences with industry experts on technical subjects as well as on career awareness.	Head of Department Academic Staff Programme Manager	Short Term
To set up an alumni association and seek volunteer guest speakers to talk about their career pathways and prospects.	Head of Department Student Union Public Relations Office	Short Term
Set up a career and employability service department with dedicated staff to help all students from the university in their career development. The services may range from interview practice to job hunting, CV writing, etc.	Director of Academic Affairs Public Relations Office	Medium Term

### Year 3 – Stage 3: Strategy for Career Support Pre/Post Graduation

<b>Key Objective:</b> To provide guidance, advice and career information resources to graduates.		
Objectives/Actions	Responsible Parties	Time Frame for Implementation
Provide opportunities for potential employers to be invited to final-year student project/dissertation presentations/vivas.	Academic Staff Programme Manager	Short Term
To offer career advice and employability services to alumni.	Public Relations Office	Medium Term
To set up a mechanism for conducting tracer studies of students one year after graduation, for all programmes.	Director of Academic Affairs Quality Assurance	Medium/Long Term

## Year 4 – Stage 4: Strategy for Learning about Academic Programmes

Key Objective: To ensure that employability skills are integrated in the curriculum development process.		
Objectives/Actions	Responsible Parties	Time Frame for Implementation
To seek accreditation of programmes, where applicable, from professional bodies.	Head of Department Academic Staff Programme Manager Academic Council	Medium/Long Term
To ensure that employability skills are clearly identified and mentioned in programme/course specifications.	Head of Department Academic Staff Programme Manager	Medium/Long Term
To set up an employer feedback questionnaire on the relevance and suitability of existing and prospective programmes.	Director of Academic Affairs Head of Department Programme Manager Quality Assurance	Short/Medium Term
To update the curriculum in line with changes within the industry by ensuring that the advisory committee meets at least after every first cycle of each programme or during the mid-term of the programme.	Director of Academic Affairs Advisory Committee Head of Department Programme Manager Quality Assurance	Medium/Long Term
To integrate employability skills through the use of work-related learning activities.	Academic Staff	Medium/Long Term

### 4.4.2 The University of St. Andrews

An example of the template used to develop an operational plan at the University of St. Andrews is given in Table 4 and the plan in Annex 1. The latter details the activities conducted in various

areas, including the creation of a “Preparation for Student Life App” that includes “skills for the future.”

Table 4. Template for developing an operational plan (from the University of St. Andrews)

 <b>Employability Strategic Action Plan</b>					
What is the Name of the Initiative? What Phase Does it Target?	What's the Purpose? What employability skills are targeted?	What Actions Are Needed?	Who is Responsible?	When Should it Be Completed?	How will this initiative be evaluated and when?
Categorized Counselling  Phase: 1 - Year 1 Sensitization and Career Awareness Stage	<b>Purpose:</b> To help first year students understand career paths and options within chosen program of study  <b>Targeted Employability Skills:</b> Transferability, Self-Reflexivity	1. Train 12 staff members in career counselling 2. Assign students to counsellors 3. Ensure each student has 1 mandatory meeting with counsellor per year	Manager of Student Services	Training to be completed by July 21, 2019  Counselling sessions to be completed by end of term 2.	Program will be evaluated by student-facing survey at end of term

Source: <https://www.st-andrews.ac.uk/media/proctor/documents/employability-strategy.pdf>

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# **Competency-Based Curriculum Development**

## 5.0 Phase 3: Implementation

### 5.1 Developing a Competency-Based Curriculum – Programme Level

Phase 3 of COL's Employability Model asks institutions to use competency-based learning and graduate attribute mapping, alongside the development of soft skills and work-based-learning, as the principal tools to develop employability.

How these tools are utilised at your institutions will be — and should be — diverse. COL

strongly encourages institutions to customise programmes to match the contextual needs of a region and to match the resource realities of diverse institutions.

This section illustrates how the curriculum of a programme can be developed or reviewed, based on the needs of the labour market and professional bodies.

#### 5.1.1 Methods: Developing a Competency-Based Curriculum

Competency-based learning, or competency-based education, is an approach to learning that emphasises a learner's mastery of a competency (or skill or learning outcome) as the basis for progression through a programme of study. More clearly, to progress to the next level of a programme — or a more complex skill — students must demonstrate mastery of prerequisite competencies rather than simply complete a previous course or achieve a certain academic standing.

In this way, competency-based learning prioritises students' acquisition of certain skills instead of a linear progression of education. Consequently, competency-based learning often lends itself to self-paced, online and blended learning formats, wherein students can work through competencies at their own pace and in non-linear formats.

The mastery of a competency is generally observable and must be demonstrated. Mastery is often demonstrated in three

ways: (1) progressively, through the successful completion of a set course plan, (2) non-linearly, through self-directed learning, or (3) alternatively, through the assessment and validation of a student's prior learning or experience. Alternative assessments of competency mastery can be especially helpful for adult learners who have mastered a competency in a non-school setting, such as through employment or life experience.

Competency-based learning is distinguished from more traditional approaches to education in that competencies (or learning outcomes) are usually clear and specific (rather than abstract) and are generally transferable between courses and disciplines (rather than being wholly course specific). In addition, competencies tend to focus on highly valued skills that are generally required by employers, which can lead to higher employability.

“In 2011, one hundred innovators in competency education came together for the first time. At that meeting, participants fine-tuned a working definition of high-quality competency education. The five-part working definition of competency-based education is:

- Students advance upon demonstrated mastery.
- Competencies include explicit, measurable, transferable learning objectives that empower students.
- Assessment is meaningful and a positive learning experience for students.
- Students receive timely, differentiated support based on their individual learning needs.
- Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.” (Patrick & Sturgis, 2015, p. 14)

## 5.2 Selecting the Right Competencies or Graduate Attributes

We use the terms *competencies* and *graduate attributes* interchangeably in this guide. Often, there are two categories of competencies: (1) general — those valued by most employers and professions, and (2) profession-specific — those valued or required by specific professions or accrediting bodies. The core competencies required for a profession can be found on a professional body’s website.

Prescribed competencies honour both the specific disciplinary knowledges needed to achieve a degree and the practical skills and mindsets needed to think critically and accomplish complex tasks outside of the classroom. Accordingly, the competencies outlined for a programme may vary from institution to institution in some ways but should all seek to deliver the generic and profession-specific skills valued by the labour market.

Competency-based curricula focus on both discipline-specific skills and highly valued transferable skills that enable students to put their learning to use in diverse settings. Consequently, the competencies required to achieve a certain degree, diploma, certificate, recognition or course of study are usually

developed in collaboration with employers, faculty and other key stakeholders to make them especially valuable, transferable and useful in practical ways. As an example, Bates (2015) outlines how competencies are selected at Western Governors University (WGU):

For each degree, a high-level set of competencies is defined by the University Council, and then a working team of contracted subject matter experts takes the ten or so high level competencies for a particular qualification and breaks them down into about 30 more specific competencies, around which are built online courses to develop mastery of each competency. Competencies are based upon what graduates are supposed to know in the workplace and as professionals in a chosen career. Assessments are designed specifically to assess the mastery of each competency; thus, students receive either a pass/no pass following assessment. A degree is awarded when all 30 specified competencies are successfully achieved.

### 5.2.1 Identification of Competencies

Although some universities have designed entire degree programmes around competencies, such a fulsome endeavour is not necessary to begin to reap the benefits of competency-based learning at your home institution. Instead, institutions can help students master skills — and develop employability — by designing some courses, modules or even workshops with a competency-based framework, as a starting point. Eventually, the aim is to scaffold competencies throughout an entire programme of study, which leads to the greatest development of employability.

You can begin by asking: *What are the skills, competencies and attributes our graduates need to be successful in the world of work? What are the required competencies of a professional association or accreditation?*

Answer these questions using information from diverse sources, including academic literature, government and employer reports, professional body reports (including human resource development council reports), alumni feedback, etc.

Many universities also create a list of core competencies they aspire to help all their graduates achieve, regardless of discipline, in addition to competencies developed by individual faculties or programmes. This can be a valuable approach for all universities.

In several countries, government bodies such as human resource development councils or national qualification agencies, or professional bodies have already developed a set of competencies that are required for specific disciplines. When these are not readily available, the university can organise meetings to consult relevant stakeholders and determine the necessary attributes. In a project conducted at the University of Namibia (UNAM), meetings were organised with the national qualification agencies as well as legal associations to determine the competencies required of legal graduates (West, 2019).

The following examples illustrate the methods used at OUM and UNAM to determine competencies, based on labour market needs.

## 5.3 Integrating Competency-Based Learning into Institutional Programming

### 5.3.1 Open University of Mauritius – MSc in Applied Computing

OUM utilises the following core competencies to guide their curriculum development: (1) knowledge and understanding, (2) subject-specific content, (3) intellectual and research skills, (4) transferable and generic skills and (5) subject-specific practical skills. Each core

competency is associated with specific learning outcomes for the course or module. These are then clearly mapped out. A visual example is provided below for further inspiration (from Luckho, Sannasee & Doomun, n.d.).

**Table 5: Competencies identified at OUM for the MSc in Applied Computing**

Module Title	Knowledge and Understanding					Subject Specific Intellectual and Research Skills							Transferable and Generic Skills					Subject specific practical skills
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	D1
Artificial Intelligence and Machine Learning	•	•	•			•	•							•	•			•

**On successful completion of this programme you will possess the knowledge and understanding of:**

- A1.** Scientific and technological principles underlying Computer Science
- A2.** Advanced concepts in specialist areas of computer science such as artificial intelligence, cyber security, software engineering and web technology
- A3.** Specialist tools and state-of-the-art techniques used to design, implement and verify software-based systems

**On successful completion of this programme learners should be able to:**

- B1.** Model and design advanced and specialised software applications, information systems and other computer-based solutions
- B2.** Test, evaluate, and maintain such applications and solutions
- C2.** Communicate effectively and present technical information concisely in written and verbal forms to a range of audiences
- C3.** Work efficiently and effectively as a member of a project team, managing you own contribution and the overall task
- D1.** Use specialist software development and analysis tools

### 5.3.2 University of Namibia: LLB Programme Learning Outcomes

This section presents the employability attributes/competencies identified during stakeholder consultations at UNAM for the LLB online programme.

#### Employability Attributes / Learning Outcomes

##### A. Knowledge and Understanding

On successful completion of this programme you will possess the Knowledge and Understanding to:

1. Illustrate the relationship between ethics and law;
2. Solve novel legal problems within different contextual perspectives;
3. Demonstrate deep conceptual understanding of their chosen discipline.

##### B. Subject-Specific Intellectual and Research Skills

On successful completion of this programme you will be able to, individually or in a group:

1. Apply the most important concepts of law at national and international levels;
2. Apply critical academic legal thinking in both theory and practice;
3. Conduct research (including qualitative and quantitative research) on legal and multi-disciplinary issues using electronic sources.

##### C. Transferable and Generic Skills

On successful completion of this programme you will be able to, individually or in a group:

1. Negotiate on behalf of clients in legal transactions;
2. Conduct yourself in a professional, ethical and financially viable manner;
3. Approach challenges with critical thinking and innovation;
4. Develop into independent learners with high self-efficacy;
5. Display a strong sense of personal and professional identity;
6. Demonstrates a sense of values and ethics personally and professionally.

##### D. Subject-Specific Practical Skills

On successful completion of this programme you will be able to, individually or in a group:

1. Litigate in all the Namibian Courts in criminal, civil and labour matters;
2. Litigate in international courts and tribunals and in foreign courts;
3. Advise clients on legal problems;
4. Evaluate the different legal theories and interpretative models.

## 5.4 Graduate Attribute Mapping

### 5.4.1 Methods: Using a programme scorecard to determine its employability readiness

Universities now have to assess how their curricula, programmes and courses are addressing the competencies required. They have to match the learning outcomes to the set of competencies/graduate attributes. A programme scorecard can be used to identify the current

gaps to address so as to improve employability at the programme and departmental levels. The following UNAM example illustrates an employability mapping questionnaire used to determine the rating of the LLB programme with a scorecard.

### Employability Mapping Audit Questionnaire

<b>Monday, 3 June 2019</b>	
<b>Institution</b>	University of Namibia
<b>Faculty</b>	Law
<b>Programme</b>	LLB

### Categories of questions

<b>X. Graduate and Curriculum</b>	X.1. Awareness of graduate employment status X.2. Career-path development X.3. Promoting employability in the curriculum
<b>Y. Employer relations</b>	Y.1. Relationships with employers Y.2. Working experience
<b>Z. Learner Support</b>	Z.1. Supporting learners to develop their careers Z.2. Extracurricular activity

A scoring system is used for our Employability Mapping Audit. Respondents are encouraged to rate each statement in the questionnaire on a scale of 0-3 with:

**Highest score = 3** – the curriculum/institution under assessment optimally satisfies the point that has been considered in the audit questionnaire; the process is of excellent quality.

**Average Score = 2** – the curriculum/institution under assessment partially satisfies the point that has been considered in the audit questionnaire; however, there is a need, and potential, for further improvement.

**Low Score = 1** – the curriculum/institution under assessment poorly satisfies the point that has been considered in the audit questionnaire. The processes are of poor quality.

**No Score = 0** – the curriculum/institution under assessment has not considered this point at all as part of its procedures.

## SCORING

<b>X.1</b>	<b>Awareness of graduate employment status</b>	<b>Scores</b>	<b>Sub-totals</b>		
X.1.1	Is the Faculty of Law aware of the employment status of their graduates?	0			
X.1.2	Are current enrolees aware of the employment status of past graduates?	0			
X.1.3	Do academic staff have access to graduate employment data of the last 2 years?	0			
X.1.4	Do alumni share their employment experience with current enrollees of the Faculty of Law?	0			
X.1.5	Is information about potential destinations in employment made available to students enrolled at the Faculty of Law?	0			
X.1.6	Are students aware of the destinations in employment when enrolling in a programme in the Faculty of Law?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>X.2</b>	<b>Career-path development</b>	<b>Scores</b>			
X.2.1	Are graduate career profiles available to students?	0			
X.2.2	Are visitors giving research talks and encouraged to reveal their own career paths?	0			
X.2.3	Are students explicitly taught career management skills?	0			
X.2.4	Do more senior graduates visit to talk about their career paths?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>X.3</b>	<b>Promoting employability in the curriculum</b>	<b>Scores</b>			
X.3.1	Is the programme updated about the skills that employers are looking for in graduates?	0			
X.3.2	Are employers consulted during curriculum building, and do they provide feedback on its content or about their expectations?	0			
X.3.3	Are generic skills (e.g. communication, group working, IT) embedded in your curriculum/programme?	0			
X.3.4	Are generic skills assessed in the same way as hard skills in your curriculum?	0			

X.3.5	Is there a skills matrix which is completed by each student?	0			
X.3.6	Does the programme assess the ability of learners to write clear, concise, correct English?	0			
X.3.7	Are subject-specific skills assessed as part of the curriculum?	0			
X.3.8	Is QAA benchmarking embedded in the curriculum?	0			
X.3.9	Are appropriate professional attitudes developed and discussed with students?	0			
X.3.10	Have work-related learning activities been integrated in the programme/curriculum?	0			
X.3.11	Are enrollees given a basic grounding in ethics within the discipline field?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>Y.1</b>	<b>Relationships with employers</b>	<b>Scores</b>			
Y.1.1	Are potential employers aware of the skills being acquired by students enrolled on the programme?	0			
Y.1.2	Does your institution have a privileged relationship with one/several important employers in the country?	0			
Y.1.3	Do students have the opportunity to visit local employers?	0			
Y.1.4	Are employers offered the opportunity to visit and give talks about employment opportunities in the field?	0			
Y.1.5	Do employers attend any student final-year project presentations?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>Y.2</b>	<b>Work experience</b>	<b>Scores</b>			
Y.2.1	Are the opportunities provided for work experience during vacations?	0			
Y.2.2	Are placements encouraged as part of the institution's courses?	0			
Y.2.3	Do students carry out course project work in real settings with employers?	0			
Y.2.4	Are students expected to obtain work experience before graduation?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>Z.1</b>	<b>Supporting learners to develop their careers</b>	<b>Scores</b>			
Z.1.1	Is a professional development portfolio maintained throughout the course?	0			
Z.1.2	Is reflection on and review of achievements actively promoted within the course?	0			
Z.1.3	Do students get help with producing/improving a CV?	0			
Z.1.4	Do students get help with letters of application for employment?	0			
Z.1.5	Is there a career service centre and are students aware of the services it offers?	0			
Z.1.6	Is help with module choice available in each year?	0			
	<b>Subtotal</b>		<b>0</b>		

<b>Z.2</b>	<b>Extracurricular activity</b>	<b>Scores</b>			
Z.2.1	Is the contribution of extracurricular activity to CV and skills development explained to students?	0			
Z.2.2	Are there team-building activities for students at the faculty?	0			
Z.2.3	Are students required to work in groups and thus build teamwork and project management skills?	0			
Z.2.4	Are arrangements in place to encourage voluntary work by students?	0			
	<b>Subtotal</b>		<b>0</b>		

	<b>Total</b>		<b>0</b>	<b>0</b>	<b>%</b>
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**Total Score on the Employability Mapping Toolkit is 120.**

**If the audit returns a score of 0 – 49% (i.e., 0 – 59 points),** it means that the curriculum/programme under investigation does not provide the minimum, in terms of employability guidance, for learners enrolled in the programme. The programme needs to be completely reviewed in order to boost the employability of graduates enrolled in the programme.

**If the audit returns a score of 50 – 69% (i.e., 60 – 83 points),** it means that the curriculum/programme under investigation does provide the minimum requirements, in terms of employability guidance, for learners enrolled in the programme. However, there is room for further improvement so as to boost the employability of graduates enrolled in the programme.

**If the audit returns a score of 70-100% (i.e., 84 – 120 points),** it means that the curriculum/programme under investigation is structured in a way that provides maximum guidance to boost the employability of graduates enrolled in the programme.



### 5.4.2 Method: Graduate Attribute Mapping

Graduate attribute mapping — also known as curriculum mapping — is a clear and comprehensive overview of the skills and attributes a student is expected to learn as they complete a programme of study. It is also an effective tool to help teams understand the competencies and skills their students are learning (and when they are being learned).

In addition, graduate attribute mapping also helps teams highlight any unintentional learning or skills gaps in a particular programme of study, or conversely, any areas of special strength or focus.

Mapping requires that each course have clearly described learning outcomes, which list outcomes specific to the course alone and those prescribed by the programme of study. As you think about integrating competencies into your programme, make sure you write clear and measurable learning outcomes for each course. These learning outcomes are then mapped to the required competencies of the programme. In this manner, pathways are created.

Graduate attribute mapping requires faculties to decide on some key universal competencies required for all graduates. These competencies are built into courses throughout different stages of a programme of study and with varying degrees of intensity. Consider using Bloom's Taxonomy to help craft your outcomes.

Ideally, students will achieve all competencies before graduating. Because each course develops different competencies but some overlap, there is still some flexibility in course selection, although all courses are working towards the same aim.

There are numerous ways to map graduate attributes. In general, graduate attribute mapping consists of the following steps:

1. Determining universal and profession-specific competencies
2. Determining course-specific outcomes (which include the achievement of some course-specific competencies and some universal or profession-specific competencies)
3. Mapping *all* competencies within a programme or degree, for every year of the student journey
4. Creating pathways for students to achieve the desired competencies of a degree or programme (connecting the dots)
5. Assessing the competency strengths, redundancies and gaps of a programme or degree

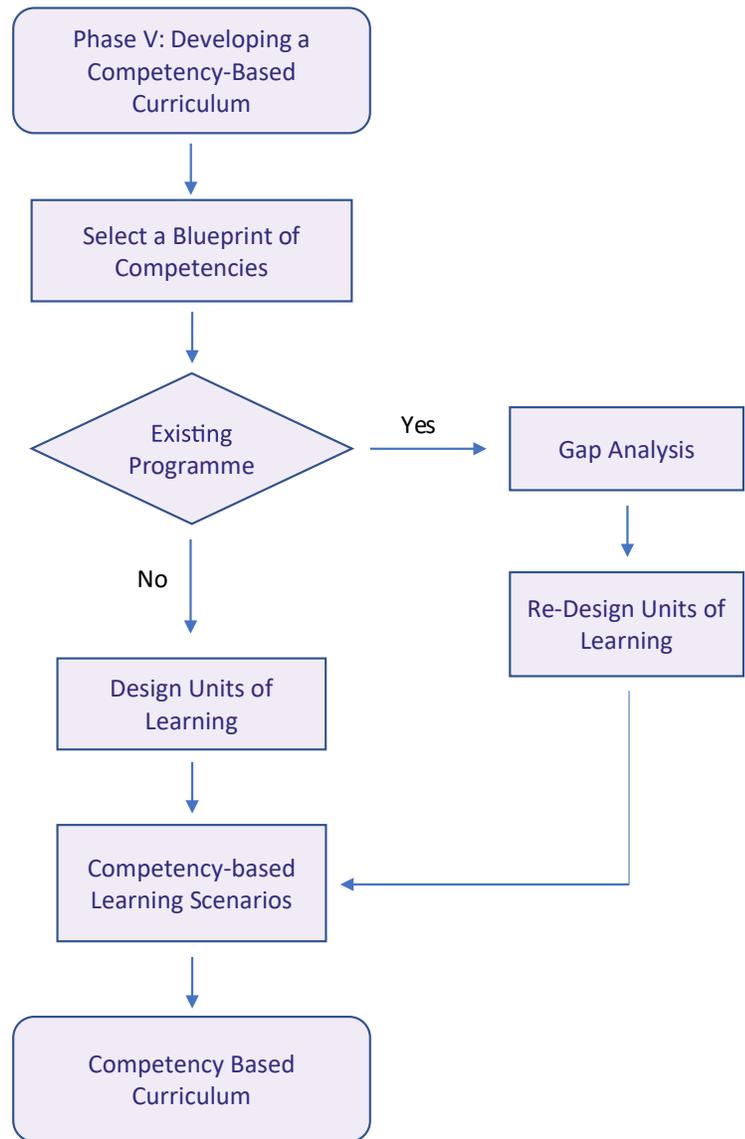
The section below provides a step-by-step visual guide as a tool to help institutions better envision how they might implement curriculum mapping.

## 5.5 Competency Integration Flow Chart from the Open University of Mauritius

In this model developed by Sannasee et al. (2019), a “blueprint of competencies” (general competencies + discipline-specific competencies + high-value labour-market competencies) is used to identify which courses need to be designed — or redesigned — with the selected “blueprint of competencies” in mind.

If instructors believe an existing course aligns well with certain competencies from the curated list, the course undergoes a “gap analysis” to understand which competencies need to be built into the curriculum. Further, entire programmes are assessed to understand which competencies are being developed and which are not. After identifying “missing competencies,” instructors redesign learning units to include them.

If no course or programme is developing certain competencies, units are created to ensure development in those areas.



**Figure 6: Flow chart for developing a competency-based curriculum**

Source: Sannasee et al. (2019)

### 5.5.1 Example: Graduate Attribute Mapping for OUM

This example illustrates, step by step, OUM's graduate attribute mapping for the MSc in Applied Computing and Digital Technologies;

it has been adapted from OUM's programme specifications (OUM, n.d.).

#### Step 1. Create Universal Competencies for All Graduates and Profession-Specific Competencies

Consider the following questions:

- What are the most valued generic attributes and traits for this discipline?
- What are the most valued profession-specific attributes and traits for this discipline?
- Are there any special competencies students need to achieve to become accredited by a regulating body?



Programme-/  
Profession-Specific  
Competencies

## Aims of the Programme

On successful completion of the programme, learners should be able to:

- Develop the skills to solve real-world industry-related problems based on advanced knowledge of the principles and methodologies of a range of computer science specialties, such as artificial intelligence, cyber security, data science, software engineering and web technology
- Use appropriate techniques and tools in the management of IT projects
- Apply concepts and best practices in the IT industry
- Develop independent learning skills as required for continued professional development
- Disseminate the findings and conclusions of research clearly and unambiguously to specialist and non-specialist audiences

## Programme Learning Outcomes

### 1. Knowledge and Understanding

On successful completion of this programme, you will possess knowledge and understanding of:

- A1. Scientific and technological principles underlying software engineering and computer science
- A2. Advanced concepts in specialist areas of computer science, such as artificial intelligence, cyber security, software engineering and web technology
- A3. Specialist tools and state-of-the-art techniques used to design, implement and verify software-based systems
- A4. Methods of software design, development, project management and testing
- A5. Applicable methods of research and enquiry within the discipline

### 2. Subject-Specific Intellectual and Research Skills

On successful completion of this programme, you will be able to:

- B1. Model and design advanced and specialised software applications, information systems and other computer-based solutions
- B2. Test, evaluate and maintain such applications and solutions
- B3. Analyse problems to determine appropriate methods of design, testing and evaluation
- B4. Acquire new knowledge and understanding through critical reading of research materials
- B5. Find, read, understand and explain literature related to advanced and specialised areas of computer science, including scientific publications, industrial documentation, standards, as well as ethical, legal and environmental guidance
- B6. Apply such knowledge and understanding to specialist design problems.
- B7. Formulate a research project involving an advanced and specialised software application, system, or other computer-based solution, using appropriate state-of-the-art techniques, technologies and tools

### 3. Transferable and Generic Skills

On successful completion of this programme, you will be able to:

- C1. Use a range of sources, both conventional and electronic, to locate relevant information and critically appraise that information
- C2. Communicate effectively and present technical information concisely in written and verbal forms to a range of audiences
- C3. Work efficiently and effectively as a member of a project team, managing your own contribution and the overall task
- C4. Work independently on a significant research project, managing time and risk effectively
- C5. Recognise legal and ethical issues of concern to businesses, professional bodies and society, including but not limited to information security, and follow relevant guidelines to address these issues

### 4. Subject-Specific Practical Skills

On successful completion of this programme, you will be able to:

- D1. Use specialist software development and analysis tools

### Graduate Attributes

The Open University Graduate Attributes are a set of core competencies to which we aspire in all our degree programmes.

**Our aim for our graduates is that they will:**

- Demonstrate deep conceptual understanding of their chosen discipline
- Approach challenges with critical thinking and innovation
- Develop into independent learners with high self-efficacy
- Display a strong sense of personal and professional identity
- Demonstrate a sense of values and ethics personally and professionally

### Career Opportunities

Graduates mainly go on to work in the IT industry as senior developers, team leaders, senior consultants, project managers or senior technical specialists. Academic possibilities include further study towards a PhD qualification, or research assistant positions undertaking related research.

## Step 2: Create Individual Course Outcomes. Include Both Course-Specific Outcomes and Universal Competencies

Consider the following questions:

- What are the desired outcomes for the course?
- What level of competency mastery can students hope to accomplish in this course? Is this an introductory, intermediate or high-level course?
- What universal competencies can I reasonably include in the course?
- How will these competencies be assessed?

### Course 111

OUpm013111 – Service-Oriented Architecture and Web Services
<p><b>Aim</b></p> <p>The aim of the module is to understand XML fundamentals and how to build applications based on XML. The key principles behind SOA will be underlined. The module provides learners with the different elements of web services technology to realise SOA applications. Moreover, the module will help learners to study the various web service standards.</p>
<p><b>Key Elements</b></p> <ul style="list-style-type: none"> <li>• Web technologies</li> <li>• Introduction to XML</li> <li>• Building XML-based applications</li> <li>• Web services architecture principles</li> <li>• Web services and service consumers</li> <li>• Web services protocols</li> <li>• Design and implementation of web services</li> <li>• Security aspects and implications</li> </ul>
<p><b>Learning Outcomes</b></p> <p><i>After successful completion of this module, learners should be able to:</i></p> <ul style="list-style-type: none"> <li>• Design, develop and test web services</li> <li>• Understand concepts related to web services: Web Services Description Language (WSDL), Simple Object Access Protocol (SOAP) and Universal Description, Discovery and Integration (UDDI)</li> <li>• Apply the basic principles of service-oriented architecture to develop a sample application</li> <li>• Design, develop and test applications in XML</li> <li>• Evaluate emerging and proposed standards for the main components of web services architectures</li> <li>• Work efficiently and effectively as a member of a project team, managing your own contribution and time effectively</li> <li>• Present technical information in writing and orally to an audience</li> </ul>

Course-Specific  
Competencies

Universal  
Competencies

### Step 3: Map All Competencies Developed, Across All Courses

### Step 4: Connect the Dots to Visualise Pathways of Required Courses and Electives that Help Students Achieve All Competencies

### Step 5: Assess Areas of Emphasis and Gaps

Consider the following questions:

- What skills and attributes are being highly emphasised? Are these the right ones?
- What skills and attributes are less emphasised? Is this okay?
- Are there courses or modules that need to be redesigned? Are the pathways for attaining mastery of skills and attributes clear?

Learning outcomes mapping document																					
Module Code	Module Title	Knowledge and Understanding					Subject-Specific Intellectual and Research Skills							Transferable and Generic Skills					Subject-Specific Practical Skills		
		A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	C5	D1		
OUpm013111	Service-Oriented Architecture and Web Services	•	•	•			•	•							•	•				•	
OUpm013112	Cloud Computing Applications	•	•	•			•	•						•	•				•	•	
OUpm013113	Web Engineering & Analytics	•	•	•			•	•						•	•					•	
OUpm013121	Business IT					•			•					•	•				•		
OUpm013122	Wireless Sensors and Embedded Systems	•	•	•			•	•						•	•					•	
OUpm013123	Artificial Intelligence and Machine Learning	•	•	•			•	•						•	•					•	
OUpm013211	IT Project Management													•	•						
OUpm013212	Research Methods													•	•				•	•	
OUpm013213	Mobile Application Development	•	•	•			•	•						•	•					•	
OUpm013221	Cyber Security and Cyber Law		•											•	•					•	
OUpm013222	Big Data Theory and Practice	•	•									•		•	•				•		
OUpm013223	Project	Depending on the choice of topic, various combinations of the knowledge and understanding learning outcomes will be demonstrated					•	•	•	•	•	•	•	•	•				•	•	•

### 5.5.2 Example: Sample Curriculum Mapping for a Business Course

Business Administration Map	Econ 207	Econ 208	CS 214	Eng 200	Math 1165	Busi 201	Busi 203	Busi 211	Busi 231	Busi 241	Busi 251	Busi 252	Busi 281	Busi 371	Busi 411	
	Macro-Economics	Micro-Economics	Microcomp App for Bus	Writing for Bus	Pre-Calc (Bus)	Intro to Bus	Bus Statistics	Prin Mgmt	Prin Mktg	International Bus	Prin Acctg I	Prin Acctg II	Bus Law I	Mgt Finance	Bus Policy	
<b>Writing Competencies</b>																
Identify a subject and formulate a thesis statement						I			R							E
Organize ideas to support a position				I		R			R				R			E
Write in a unified and coherent manner appropriate to the subject matter				I		R			R				R			E
Use appropriate sentence structure and vocabulary				I		R			R				R			E
Document references and citations according to an accepted style manual						I			R				R			E
<b>Critical Thinking Competencies</b>																
Identify business problems and apply creative solutions								I	R	R	R	R		R		E
Identify and apply leadership techniques								I						R		E
Translate concepts into current business environments								I	R	R	R	R		R		E
Analyze complex problems by identifying and evaluating the components of the problem								I			R	R	R	E		E
<b>Quantitative Reasoning Competencies</b>																
Apply quantitative methods to solving real-world problems					I		R				R	R				E
Perform necessary arithmetic computations to solve quantitative problems					I		R				R	R				E
Evaluate information presented in tabular, numerical and graphical form					I		R				R	R				E
Recognize the reasonableness of numeric answers					I		R				R	R				E
<b>Oral Communications Competencies</b>																
Organize an oral argument in logical sequence that will be understood by the audience						I		R	R	R						E
Use visual aids effectively to support an oral presentation						I		R	R	R						E
Demonstrate professional demeanor, speak clearly in well-modulated tone, and engage the audience						I		R	R	R						E
Exhibit good listening skills when others are speaking						I		R	R	R						E

General Employability Competencies and Attributes

Source: [https://carleton.ca/viceprovost/wp-content/uploads/sample\\_business\\_curriculum\\_map.pdf](https://carleton.ca/viceprovost/wp-content/uploads/sample_business_curriculum_map.pdf)

Here is another example of graduate mapping, for a business course at New Jersey City University:

<b>Business Administration Map</b>	<b>Econ 207</b>	<b>Econ 208</b>	<b>CS 214</b>	<b>Eng 200</b>	<b>Math 1165</b>	<b>Busi 201</b>	<b>Busi 203</b>	<b>Busi 211</b>	<b>Busi 231</b>	<b>Busi 241</b>	<b>Busi 251</b>	<b>Busi 252</b>	<b>Busi 281</b>	<b>Busi 371</b>	<b>Busi 411</b>
<b>Technology and Information Literacy</b>															
Identify problem/topic						I		R							R
Demonstrate familiarity with information resources and technologies						I		R							R
Conduct search query						I		R							R
Evaluation sources of information						I		R							R
<b>Computer Literacy</b>															
Demonstrate computer literacy in preparation of reports and presentations			I							R					E E
Demonstrate ability to use software application to solve business problems							I				R	R			E
Conduct search queries through the use of the Internet						I		R	R						E
<b>Values Awareness</b>															
Recognize ethical issues						I		R	R	R				E	E
Identify ethical issues						I		R	R	R				E	E
Identify theoretical frameworks that apply to corporate social responsibility						I		R	R	R				R	R E
Translate ethical concepts into responsible behavior in a business environment						I		R	R	R				R	E
Develop values awareness						I		R	R	R					E
<b>CONTENT-SPECIFIC COMPETENCIES</b>															
<b>Global Business Competencies</b>															
Demonstrate knowledge of contemporary social, economic, and political forces, their interrelationship; and their impact on the global business environment	I	I				I		R	R	RE					R R
Identify the integration of global markets from both financial and product/service perspectives.						I			R	RE					R R
Incorporate diverse cultural perspectives into business decisions						I		R	R	RE					R
<b>Accounting Competencies</b>															
Understand the role of the accounting information system within an organization's overall information system											I	R			R
Demonstrate knowledge of the accounting cycle and the ability to perform necessary procedures at each step of the cycle for both corporate and non-corporate entities											I	R			
Describe, prepare and interpret comparative financial statements using analytical techniques such as ratios and common-size statements											I	R			E

Profession-/ Programme-Specific Competencies

<b>Business Administration Map</b>	Econ 207	Econ 208	CS 214	Eng 200	Math 1165	Busi 201	Busi 203	Busi 211	Busi 231	Busi 241	Busi 251	Busi 252	Busi 281	Busi 371	Busi 411	
Understand the differences between financial and managerial accounting																
Understand the role of managerial accounting analysis, control and planning of costs within the corporation											I	R				
<b>Finance Competencies</b>																
Integrate knowledge of economics, accounting, and quantitative analysis in the process of making financial decisions	I	I													IRE	
Access and interpret financial market data using both Internet and print sources						I		R	R	R					RE	
Apply basic computational techniques and/or spreadsheet software to solve financial problems							I				R	R			E	
Compute return and risk measures for basic financial assets (stocks and bonds)															I	
Analyze corporate financial statements to pinpoint strengths and weaknesses.											I	R			E R	
Identify the impact of investment, financing and dividend policy decisions on the value of an enterprise															I	
Use financial tools for life decisions about items such as housing, credit, retirements, and investments															I	
<b>Management Competencies</b>																
Define basic terms used in management						I			E							R
Develop a basic strategic planning process for an organizational unit						I			E							R
Derive policies and practices that meet the cultural and global challenges of a changing workforce						I			E							R
Translate productivity, quality and efficiency concepts to current business environments						I			E							R
<b>Marketing Competencies</b>																
Identify, evaluate and translate basic marketing problems into powerful business solutions																IRE
Analyze buyer behavior																IRE
Utilize a marketing information system to achieve a competitive advantage																IRE
Improve ability to develop new products and evaluate pricing, promotional and distribution strategies																IRE
<b>I=Introduce; R=Reinforce; E=Emphasize</b>																
<i>Developed by Business Administration faculty at New Jersey City University</i>																



### 5.5.3 Example: Graduate Attribute Mapping for UNAM LLB Programme

Module Code	Module Title	Knowledge and Understanding			Subject-Specific Intellectual and Research Skills			Transferable and Generic Skills						Subject-Specific Practical Skills			
		A1	A2	A3	B1	B2	B3	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
Year 1																	
ULEA 3519	English for Academic Purposes								●	●	●	●	●	●	●		
UCSI 3529	Contemporary Social issues	●							●	●	●	●	●	●	●	●	●
LJIL 3510	Introduction to Law	●	●	●		●	●		●	●	●	●	●	●		●	●
LPPE 3501	Law of Persons	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJCS 3510	Constitutional Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
UCLC 3509	Computer Literacy									●	●	●	●				
LPFA 3532	Family Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Year 2																	
LJCU 3601	Customary Law I	●	●	●	●	●	●	●	●	●	●	●	●			●	●
LCLA 3651	Labour Law	●	●	●	●	●	●	●	●	●	●	●	●			●	●
LCCT 3610	Law of Contract	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPPR 3690	Law of Property	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJAD 3660	Administrative Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJCR 3771	Criminal Law I	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJLD 3602	Legal Interpretation & Drafting	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
JCU 3602	Customary Law II	●	●	●	●	●	●	●	●	●	●	●	●			●	●
LJCR 3772	Criminal Law II	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
Year 3																	
LPRM 3761	Research Methodology	●	●	●	●	●	●		●	●	●	●	●			●	●

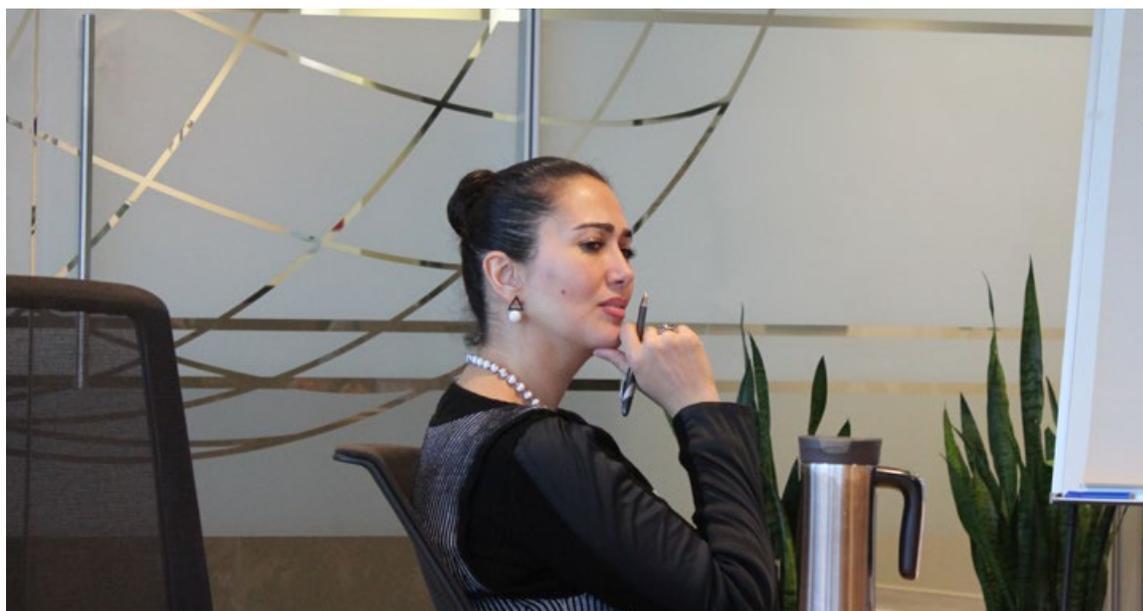
Module Code	Module Title	Knowledge and Understanding			Subject-Specific Intellectual and Research Skills			Transferable and Generic Skills						Subject-Specific Practical Skills			
		A1	A2	A3	B1	B2	B3	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
LJHR 3761	Human Rights Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LCCM 3772	Commercial Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPCP 3771	Criminal Procedure		●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPCI 3771	Civil Procedure		●	●	●	●	●	●	●	●	●	●	●			●	●
LCAC 3720	Accountancy for Lawyers			●						●	●	●	●				
LJPU 3740	Public International Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPDE 3720	Law of Delict	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPEV 3720	Law of Evidence		●	●	●	●	●	●	●	●	●	●	●		●	●	●
LCAS 3772	Law of Associations	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
<b>Year 4</b>																	
LCTX 3862	Tax Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LCMA 3761	Maritime Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPCN 3772	Conveyancing & Notarial Practice	●	●	●	●	●	●	●	●	●	●	●	●			●	●
LCNI 3742	Negotiable Instruments	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
CIS 3842	Law of Insolvency	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJEN 3761	Environmental Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPPR 3870	Private International Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJCO 3861	Comparative Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LCCL 3861	Competition Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LPIP 3871	Law of Intellectual Property	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
LJHL 3862	International Humanitarian Law	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●

Module Code	Module Title	Knowledge and Understanding			Subject-Specific Intellectual and Research Skills			Transferable and Generic Skills						Subject-Specific Practical Skills			
		A1	A2	A3	B1	B2	B3	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4
LPML 3860	Mining Law	●	●	●	●	●	●	●	●	●	●	●			●	●	●
PLC3870	Legal Aid Clinic and Professional Ethics	●	●	●	●	●	●	●	●	●	●	●				●	
JJU3860	Jurisprudence	●	●	●	●	●	●	●		●	●	●			●	●	●
CCO3860	Company Law	●	●	●	●	●	●	●	●	●	●	●			●	●	●
JRP3870	LLB Research Project	●	●	●	●	●	●	●	●	●	●	●			●	●	●
CIE3871	International Economic Law	●	●	●	●	●	●	●	●	●	●	●			●	●	●
PSU3861	Law of Succession	●	●	●	●	●	●	●	●	●	●	●			●	●	●

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# **Integrating Soft Skills, Work-Based Learning and Experiential Learning**

# 6.0 Integrating Soft Skills, Work-Based Learning and Experiential Learning

## 6.1 Developing Employability Skills

Since employability is developed in many ways, both in and outside of the classroom, developing employability involves the intersection of many skills, experiences and opportunities for the development of personal qualities. Consequently, the ways to develop employability are boundless. COL's Employability Model encourages practitioners to think about ways to enhance students' soft skills, technical skills and personal characteristics.

While it is true that *some* aspects of employability are buoyed by factors outside of the control of educators (including factors such as inherent personality traits and social or economic capital), there are many pedagogical and philosophical approaches that can directly enhance the employability of students — regardless of their background — by strategically nurturing the

development of valued qualities, skills and mindsets through experiences.

As you implement your Employability Strategic Plan, consider these five categories as opportunities for students to develop the diverse skills required for employability:

1. Curriculum Development and Design
2. Extracurricular and Co-Curricular Experiences
3. Career Preparation and Support
4. Experiential Learning
5. Personal Development

Each of these areas provides unique opportunities, both formal and informal, for students to trial and develop their employability skills. Table 6 summarises the opportunities for developing skills at the university level.



Table 6. Opportunities for developing employability skills in university

CURRICULUM & DESIGN	EXTRA- & CO-CURRICULAR	CAREER PREP & SUPPORT	EXPERIENTIAL LEARNING	PERSONAL DEVELOPMENT
<p><b>Employability attributes, skills and opportunities can be built into courses</b></p> <ul style="list-style-type: none"> <li>• Project-based</li> <li>• Collaborative</li> <li>• Opportunities for failure</li> <li>• Critical self-reflection</li> <li>• Multimodal</li> <li>• Interactive</li> <li>• Intergenerational learning</li> </ul>	<p><b>Campuses can organise conferences, competitions and experiences that enhance employability</b></p> <ul style="list-style-type: none"> <li>• Case competitions</li> <li>• Conferences</li> <li>• Speaker workshops</li> <li>• Study abroad</li> <li>• Service &amp; volunteering</li> <li>• Student clubs</li> <li>• Special training</li> </ul>	<p><b>Universities can help students understand what is needed to succeed in their chosen career</b></p> <ul style="list-style-type: none"> <li>• Personalised career counselling</li> <li>• Career awareness</li> <li>• Help with resumes, interviews and cover letters</li> <li>• Employment fairs</li> <li>• Mentorship</li> <li>• Internships</li> </ul>	<p><b>Students can be provided opportunities to try out skills in the real world, alongside members of the community who serve as co-educators</b></p> <ul style="list-style-type: none"> <li>• Project-based partnerships with local businesses, non-profits or communities</li> <li>• Course-based experiential learning co-led by community partners</li> <li>• Co-op or work–learn opportunities</li> </ul>	<p><b>Students can be given opportunities to develop key personal attributes and skills such as resilience, confidence, flexibility, innovation, networking and public speaking.</b></p> <ul style="list-style-type: none"> <li>• Resources for counselling and personal development</li> <li>• Opportunities for self-reflection</li> <li>• Opportunities to learn from failure</li> </ul>

For example, in a curricular setting, students can be challenged to work in groups on project-based assignments that value creativity and entrepreneurial thinking, instead of solely taking exams and writing papers. This helps develop soft skills. Similarly, courses can be designed in partnership with industry or community groups, wherein part of the student grade is based on interactions with outside partners. This can be a form of work-based learning.

Outside of the classroom, instructors and administrators can help students coordinate case competitions, conferences or speaker series, which help students practice soft skills such as

communication, critical thinking and planning. By helping develop these outside-the-classroom experiences, universities can compound employability and competency-based learning effectively.

Institutions can begin this process by thinking about ways specific experiences may contribute to the development of key employability attributes. Later, these ideas can be purposefully built into institutional programming and student pathways through the development of an employability strategic plan.

## 6.2 Illustrations of Employability Life Skills and Characteristics

These are some illustrations of employability life skills that are used in higher education institutions.

**Work-Based Learning** – “an educational approach or instructional methodology that uses the workplace or real work to provide students with the knowledge and skills that will help them connect school experiences to real-life work activities and future career opportunities” (American Institutes for Research, 2015). Work-based learning often constitutes a part — or in some cases all — of a student’s grade or learning outcomes. It may be a mandatory component of student graduation. It can encompass many approaches, including:

**Job Shadowing** – an opportunity for a person from different department or discipline to work alongside someone experienced in a different role in order to gain insight and experience about the position and field, and the expectations of that position. Often, these shadowing experiences are brief, involving one shift or a short period of time.

**Informational Interviewing** – a formal opportunity for learners to “interview” a person in a specific position of interest to ask questions about a career, including about responsibilities, career pathways, day-to-day experiences and job development. The interview can be conducted individually or in small groups or can even be embedded directly into a course via a guest speaker.

**Career Mentorship** – a formal mentorship commitment between a professional and a student interested in a particular field, usually involving participation in meet-ups, training and workshops on a regular, pre-determined basis (monthly, annually, bi-annually). Mentorship programmes can be enhanced by creating programmes for mentors and mentees to attend together.

**Workplace Tours/Field Trips** – formal opportunities for students to visit places of employment to learn more about how organisations function. Generally, these tours include opportunities to ask questions of diverse employees and to try some hands-on experiences, such as job shadowing or interviews.

**Apprenticeship** – a formal educational relationship in which someone learns the skills needed to perform a job directly from someone who is experienced in the role. Often, apprenticeships are a required part of an educational programme or title.

**Co-operative Education** – a programme that “alternates periods of academic study with periods of work experience in appropriate fields of business, industry, government, social services and the professions” (CEWIL Canada, 2019), in accordance with a set of criteria. Some common criteria include a predefined work period, placement, and evaluation of student performance by an employer. Co-operative Education and Work Integrated Learning Canada (2019) also requires the following criteria (provided here for inspiration):

- i. Each work term is developed in partnership with the employer and approved by the co-operative education programme as a suitable learning environment.

- ii. The student is engaged in productive work for which the student receives remuneration.
- iii. The co-op curriculum supports student learning goals, personal evaluation and reflection.
- iv. The student's performance in the workplace is supervised and evaluated by the student's employer.
- v. The student's progress during their work term is monitored by the co-operative education programme.
- vi. Both work and academic terms are full-time and follow a formalised sequence. The total amount of co-op work experience is normally at least 30 percent of the time spent in academic study. For programmes of two years or less, the total amount may be a minimum of 25 percent. A work term is defined as a minimum of 12 weeks and/or 420 hours of full-time paid experience.
- vii. Co-op programmes begin and end on an academic term.
- viii. The student completing multiple work terms is normally exposed to the work environment during more than one season of the year.



**Internships** – a structured work experience in which a learner works with an organisation to gain skills, experience and practice in the field. Internships can vary in duration and intensity and can be paid or unpaid (although unpaid internships are increasingly frowned upon).

**Practicum** – a formal experience involving the “supervised practical application of previously studied theory” (Merriam-Webster Dictionary online, 2019). Practicums are often used to prepare teachers, social workers and clinicians and can be a mandatory component of a degree or title. Practicum experiences allow students to trial their skills in real-life settings with the support of a supervisor and plenty of opportunity for feedback.

**Capstone Project** – a project intended to take place in the final year of a degree and designed to demonstrate a student’s mastery of skills and knowledge within a specific field. Although some capstone projects are akin to a bachelor’s thesis, many others take the form of portfolios, field experiences, internships or projects designed in partnership with a community or industry partner. Capstone projects are adjudicated and are a mandatory degree requirement.

**Work-Learn/On-Campus Employment** – opportunities to work on campus in professional positions that are supplemented by professional development opportunities such as workshops and mentorships. Work-learn positions are generally paid — and usually paid well above minimum wage — and are designed to give students meaningful professional experiences. They are also usually time restricted, meaning students are limited to a set number of hours per week and must reapply for the same or different positions each term. Often, work-learn positions are supported by government grants.

- **Co-operative Education and Work Integrated Learning Canada resources:** <https://www.cewilcanada.ca/>
- **Higher Education Quality Council of Ontario Practical Guide for Work-Integrated Learning:** [http://www.heqco.ca/SiteCollectionDocuments/HEOCO\\_WIL\\_Guide\\_ENG\\_ACC.pdf](http://www.heqco.ca/SiteCollectionDocuments/HEOCO_WIL_Guide_ENG_ACC.pdf)
- **Minnesota State Colleges and Universities’ resources for setting up work-based learning:** <https://careerwise.minnstate.edu/education/setting-up-workbased-learning.html>
- **Niagara College Work Integrated Learning Open Learning Initiative:** <https://www.niagaracollege.ca/cae/wil/>

**Community-Based Experiential Learning (CBEL)** – “refers to a wide variety of instructional methods and programmes that educators use to connect what is being taught in schools to their surrounding communities, including local institutions. . . . Community-based learning is also motivated by the belief that all communities have intrinsic educational assets and resources” (Education Glossary, 2014). CBEL enables students and educators to collaborate with community partners to (i) learn from each other and (ii) help students apply knowledge in real-world settings. Courses with a CBEL component are usually co-developed and co-facilitated between a university instructor and a community partner and involve some classroom learning alongside some time spent in the field.

- **Vanderbilt University’s Best Practices in Community-Engaged Teaching:** <https://cft.vanderbilt.edu/guides-sub-pages/best-practices-in-community-engaged-teaching/>
- **York University’s Experiential Education Toolbox:** <http://avptl.info.yorku.ca/experiential-education-toolbox/>

**Service Learning** – an “educational experience in which students (a) participate in an organised service activity that meets the identified community needs and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline and an enhanced sense of personal values and civic responsibility” (Bingle, Hatcher & McIntosh, 2006). Most often, service learning is incorporated into a credit-based course and constitutes part of a course grade.

- **Carolina Centre for Public Service References, Toolkits and Portals:** <https://ccps.unc.edu/resources-support/engaged-scholarship-resources/>

**Extracurricular and Co-Curricular Programming** – programmes and initiatives that occur alongside formal education programmes to help enhance student learning and professional and personal development. Generally, extracurricular and co-curricular programming is not graded, although it may sometimes appear on a transcript as a participation mark. Extracurricular and co-curricular programming can help students develop leadership skills, build social networks, enhance mental health, explore areas of interest and provide unique opportunities to trial new ideas. Some such initiatives include:

- Case competitions and challenges
- Undergraduate research and conferences
- Volunteering programmes
- Leadership programmes
- Student clubs and government
- Design teams
- Sports and academic teams

**Courses to Enhance Life Skills** – Several providers offer online and professional development courses to enable learners to develop key employability skills. Some of these are given in Annex 2.





# **Evaluation, Reflection and Planning**



## 7.0 Phase 4: Evaluation, Reflection and Planning

One of the most important — yet often overlooked — component of any project is evaluation. The effectiveness of developing and implementing an employability strategy and reforming curricula have to be assessed.

Evaluation is a powerful process that enables universities to consider what has gone well and what can be improved. In this way, evaluation helps to both inform and correct course programming.

### Follow-up Scorecard and Review

Comprehensive evaluation of an institution's overall employability strategic plan is an important component of developing and maintaining good employability practices. Institutional assessments generally consider the various components needed to create good employability strategies (courses, advisors, special programmes, involvement of stakeholders) and include benchmarks/goals that help teams measure mastery or achievement of good strategy.

### Tracer Studies

Tracer studies survey and analyse students' experiences after graduation. These assessments occur at predetermined intervals (for example, two, five or ten years). Tracer studies help institutions understand what happened to students after graduation — in terms of employment, education and career decisions — and how students feel about their educational experiences now that some time has passed. Some common questions answered by tracer studies include:

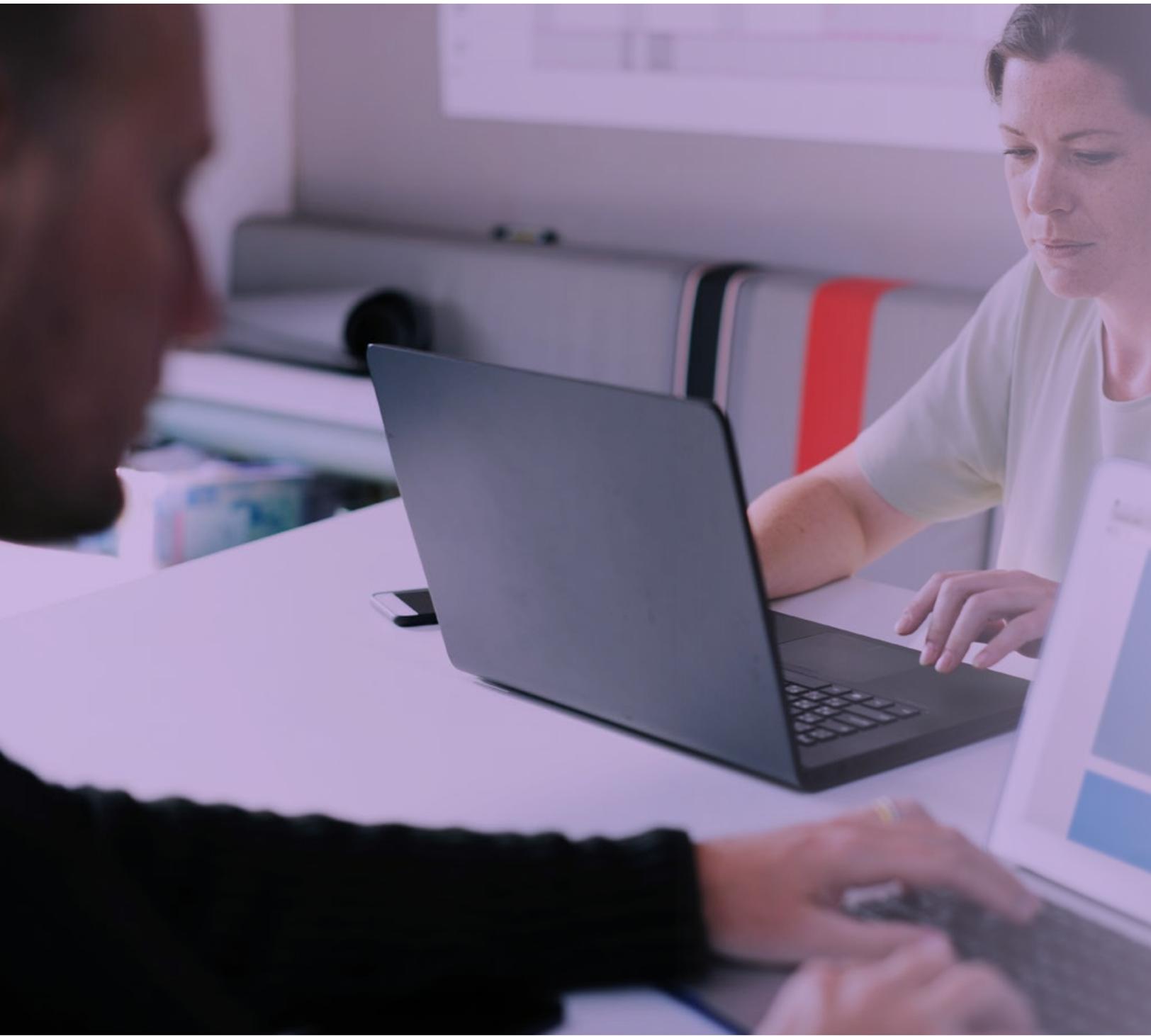
Rather than be considered an afterthought, evaluation is a tool of empowerment that is best incorporated into strategic plans so it can be administered — and utilised — at regular intervals.

Although there are many ways to evaluate the success of employability programmes, COL's model focuses on the evaluation of the employability strategy and the use of tracer studies.

These evaluations can be performed in many ways, including revisiting COL's Employability Scorecard to perform a secondary audit of the services developed and implemented since the initiation of the plan. This can help identify areas of improvement to celebrate and new areas that need more focused attention. Institutional audits using COL's scorecard should also be used at regular intervals (annually).

- What percentage of students found employment after graduation?
- In what fields are students employed?
- How quickly were they able to secure employment?
- What skills were useful for transitioning to employment?

To make real comparisons, it is preferable to have a baseline in the form of tracer studies that were conducted before the implementation of COL's Employability Model.





# Conclusion



## 8.0 Conclusion

This guide is meant to be used to increase employability readiness in higher education institutions. COL's Employability Model adopts a systematic approach with:

1. a scorecard mapping all activities and interactions with the world of work during a student's academic journey;
2. an institutional employability strategy;
3. implementation of competency-based curricula and assessment;
4. the integration of soft skills and work-based learning activities during the student lifecycle; and
5. an evaluation using the scorecard and a tracer study tool.

This guide has been piloted at the Open University of Mauritius using the MSc Applied Computing programme for competency-based curriculum development, and at the University of Namibia for an LLB course. Learning outcomes and assessment strategies were developed as a result of these pilots.

Using the scorecard before and after adopting employability readiness strategies will enable institutions to evaluate whether they are going along the right path. These strategies will enable their students to be closer to the world of work and reduce the mismatch between graduates and employers.

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## Annex 1: University of St Andrews' Operational Plan

### 5. Operational Plan

This operational plan is a summation of a range of employability activities undertaken across the University. The success of these activities will be mainly monitored internally within individual Units and Schools. Trend lines will be closely scrutinised to identify areas of success or for action.

Area of Employability	Action	Responsible Partner	Target Date	How Measured
Self-directed application, self-efficacy and self-awareness	Pre-arrival surveys sent to all incoming UG and PGT students	CAPOD, with support from Careers, Admissions, Student Services and Registry	Commencing in June 2017 and yearly thereafter	Survey data
	Creation of 'Preparation for Student Life App' including a section on 'skills for the future'	CAPOD, with support from Enhancement Theme Team	Launch in June 2017 and updated yearly thereafter	Creation of app and resultant student take up
	All students encouraged to access the 'Making Feedback Work For You' (Growth Mindset) Moodle course	CAPOD, with support from Registry and Deans	Launched in September 2017	Data on student engagement with the resource
	Personal Development planning resources signposted by Academic Advisors	Academic Advisors, with support from Careers Centre and CAPOD	Launch in September 2017	Informal monitoring
Academic studies	The Curriculum Approvals Group will consider employability factors when approving new programmes.	Curriculum Approvals Group	On-going	Inclusion on CAG agenda and in minutes, and through revision to the proposal form
	Employability will be made an explicit part of internal reviews of schools	CAPOD, with support from the Deans	Launch in September 2017	Inclusion in internal review documentation
	Schools will select a suitable member of Academic staff to act as a 'Careers Link' to support employability activity within the School	The Proctor	On-going	Number of Careers Link staff identified
	Academic Advisors will be asked to distribute a leaflet (created by the Careers Centre) at Academic Advising	Careers Centre, with support from The Proctor	Launch in September 2017	Numbers of leaflets distributed. Informal student feedback



## Annex 2: Courses and OER Resources for Employability Life Skills and Characteristics

### Coursera:

Professional Development
Specialisation in Career Success <a href="https://www.coursera.org/specializations/career-success">https://www.coursera.org/specializations/career-success</a>
Specialisation in Interviewing and Résumé Writing in English <a href="https://www.coursera.org/specializations/english-interview-resume">https://www.coursera.org/specializations/english-interview-resume</a>
Specialisation in Career Brand Management <a href="https://www.coursera.org/specializations/career-brand-management">https://www.coursera.org/specializations/career-brand-management</a>
Strategic Career Self-Management <a href="https://www.coursera.org/learn/strategic-career-self-management">https://www.coursera.org/learn/strategic-career-self-management</a>
Key Skills
Specialisation in Effective Communication: Writing, Design and Presentation <a href="https://www.coursera.org/specializations/effective-business-communication">https://www.coursera.org/specializations/effective-business-communication</a>
Introduction to Mathematical Thinking <a href="https://www.coursera.org/learn/mathematical-thinking">https://www.coursera.org/learn/mathematical-thinking</a>
Specialisations in Computer Science, Data Science and Information Technology (various) Computer Science: <a href="https://www.coursera.org/browse/computer-science">https://www.coursera.org/browse/computer-science</a> Data Science: <a href="https://www.coursera.org/browse/data-science">https://www.coursera.org/browse/data-science</a> Information Technology: <a href="https://www.coursera.org/browse/information-technology">https://www.coursera.org/browse/information-technology</a>
Specialisation in Excel Skills for Business <a href="https://www.coursera.org/specializations/excel?">https://www.coursera.org/specializations/excel?</a>
Personal Development
The Science of Success – What Researchers Know that You Should Know <a href="https://www.coursera.org/learn/success">https://www.coursera.org/learn/success</a>
Mindshift: Break through Obstacles to Learning and Discover Your Hidden Potential <a href="https://www.coursera.org/learn/mindshift">https://www.coursera.org/learn/mindshift</a>
Specialisation in Achieving Personal and Professional Success <a href="https://www.coursera.org/specializations/wharton-success">https://www.coursera.org/specializations/wharton-success</a>

### IITK Kanpur Outreach:

<http://outreach.iitk.ac.in/content/developing-soft-skills-and-personality>

### Virtual University for Small States of the Commonwealth Life Skills Course:

[http://oasis.col.org/bitstream/handle/11599/2395/2013\\_VUSSC\\_Life-Skills.pdf?sequence=1&isAllowed=y](http://oasis.col.org/bitstream/handle/11599/2395/2013_VUSSC_Life-Skills.pdf?sequence=1&isAllowed=y)

### Commonwealth of Learning Skills and Trades Repository (various skills):

<http://oasis.col.org/handle/11599/2422>

### Community College of Baltimore County OER Repository on Life Skills, College Readiness and Employability:

<https://libraryguides.ccbcmd.edu/oer/pathway>



## LEARNING FOR SUSTAINABLE DEVELOPMENT

COL is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning and distance education knowledge, resources and technologies.

**VISION:** To be the foremost global agency that promotes learning for sustainable development

**MISSION:** To help governments and institutions to expand the scale, efficiency and quality of learning by using open, distance and technology-based approaches

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