

## **Graduate Attributes**

#### **Preamble:**

Mangalore University, in keeping with the guidelines from the UGC from time to time, and as per UGC, envisages that students on completion of a programme of study must possess and demonstrate the expected graduate attributes acquired through one or more modes of learning.

The graduate attributes indicate the quality and features or characteristics of the graduate of a programme of study, including learning outcomes relating to the disciplinary area(s)/chosen field(s) of learning and generic learning outcomes that are expected to be acquired by a graduate on completion of the programme(s) of study. The graduate attributes include capabilities that help widen the current knowledge base and skills, gain and apply new knowledge and skills, undertake future studies independently, perform well in a chosen career, and play a constructive role as a responsible citizen in society.

The graduate attributes are acquired incrementally and describe a set of competencies that are transferable beyond the study of a particular subject/disciplinary area and programme contexts in which they have been developed. Graduate attributes are fostered through meaningful learning experiences made available through the curriculum and learning experience, the total University experience, and a process of critical and reflective thinking.

Graduate attributes include learning outcomes that are specific to disciplinary areas relating to the chosen field(s) of learning within broad multidisciplinary/interdisciplinary/ transdisciplinary contexts and generic learning outcomes that graduates of all programmes of study should acquire and demonstrate.

# **Disciplinary/Interdisciplinary Learning Outcomes:**

The graduate should be able to demonstrate the acquisition of:

- a comprehensive knowledge and coherent understanding of the chosen disciplinary/interdisciplinary area of study in a broad multidisciplinary context, their different learning areas, their linkages with related fields of study, and current and emerging developments associated with the chosen disciplinary/interdisciplinary areas of learning.
- practical, professional, and procedural knowledge required for carrying out skilled work/tasks related to the chosen field(s) of learning, including knowledge required for undertaking self-employment initiatives, and knowledge and mindset required for entrepreneurship involving enterprise creation, improved product development, or a new mode of organization.
- skills in areas related to specialization in the chosen disciplinary/interdisciplinary area of learning in a broad multidisciplinary context, including wide-ranging practicalskills, involving variable routine and non-routine contexts relating to the chosen field of learning.

• capacity to extrapolate from what has been learnt, translate concepts to real-life situations and apply acquired competencies in new/unfamiliar contexts, rather than merely replicate curriculum content knowledge, to generate solutions to specific problems.

## **Generic learning outcomes:**

**Complex problem-solving:** The graduate should be able todemonstrate the capability to:

• solve different kinds of problems in familiar and non-familiar contexts and apply the learning to real-life situations

**Critical thinking:** The graduate should be able to demonstrate the capability to:

- apply analytic thought to a body of knowledge, including the analysis and evaluation of policies, and practices, as well as evidence, arguments, claims, beliefs, and the reliability and relevance of evidence,
- identify relevant assumptions or implications; and formulate coherent arguments,
- identify logical flaws and holes in the arguments of others,
- analyze and synthesize data from a variety of sources and draw valid conclusions and support them with evidence and examples.

**Creativity:** The graduate should be able to demonstrate the ability to:

- create, perform, or think in different and diverse ways about the same objects or scenarios,
- deal with problems and situations that do not have simple solutions,
- innovate and perform tasks in a better manner,
- view a problem or a situation from multiple perspectives,
- think 'out of the box' and generate solutions to complex problems in unfamiliar contexts,
- adopt innovative, imaginative, lateral thinking, interpersonal skills and emotional intelligence

### **Communication Skills:** The graduate should be able to demonstrate the skills to:

- listen carefully, read texts and research papers analytically, and present complex information in a clear and concise manner to different groups/audiences,
- express thoughts and ideas effectively in writing and orally and communicate with others using appropriate media,
- confidently share views and express herself/himself,
- construct logical arguments using correct technical language related to a field of learning, work/vocation, or an area of professional practice,
- convey ideas, thoughts, and arguments using language that is respectful and sensitive to gender and other minority groups.

**Analytical reasoning/thinking:** The graduate should be able to demonstrate the capability to:

- evaluate the reliability and relevance of evidence;
- identify logical flaws in the arguments of others;
- analyze and synthesize data from a variety of sources;
- draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.

#### **Research-related skills:** The graduate should be able to demonstrate:

- a keen sense of observation, inquiry, and capability for asking relevant/ appropriate questions,
- the ability to problematize, synthesize and articulate issues and design research proposals,
- the ability to define problems, formulate appropriate and relevant research questions, formulate hypotheses, test hypotheses using quantitative and qualitative data, establish hypotheses, make inferences based on the analysis and interpretation of data, and predict cause-and-effect relationships,
- the capacity to develop appropriate methodology and tools of data collection,
- the appropriate use of statistical and other analytical tools and techniques,
- the ability to plan, execute and report the results of an experiment or investigation,
- the ability to acquire the understanding of basic research ethics and skills in practicing/doing ethics in the field/ in personal research work, regardless of the funding authority or field of study.

## **Coordinating/collaborating with others:** The graduate should be able to:

- work effectively and respectfully with diverse teams,
- facilitate cooperative or coordinated effort on the part of a group,
- act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

### **Leadership readiness/qualities:** The graduate should be able to:

- map out the tasks of a team or an organization and set the direction.
- formulatean inspiring vision and build a team that can help achieve the vision, motivate and inspire team members to engage with that vision.
- use management skills to guide people to the right destination.

#### **'Learning how to learn' skills:** The graduate should be able to demonstrate the ability to:

- acquire new knowledge and skills, including 'learning how to learn' skills, that are
  necessary for pursuing learning activities throughout life, through self-paced and selfdirected learning aimed at personal development, meeting economic, social, and cultural
  objectives, and adapting to changing tradesand demands of the workplace, including
  adapting to the changes in work processes in the context of the fourth industrial
  revolution, through knowledge/ skill development/reskillingwork independently, identify
  appropriate resources required for further learning,
- acquire organizational skills and time management to set self-defined goals and targets with timelines.
- inculcate a healthy attitude to be a lifelong learner,

## **Digital and technological skills:** The graduate should be able to:

- use ICT in a variety of learning and work situations,
- access, evaluate, and use a variety of relevant information sources,
- use appropriate software for analysis of data.

**Multicultural competence and inclusive spirit:** The graduate should be able to demonstrate:

- the acquisition of knowledge of the values and beliefs of multiple cultures and a global perspective to honour diversity,
- capability to effectively engage in a multicultural group/society and interact respectfully with diverse groups,
- capability to lead a diverse team to accomplish common group tasks and goals.
- gender sensitivity and adopt gender-neutral approach, as also empathy to the less advantaged and the differently-abled including those with learning disabilities.

### **Value inculcation:** The graduate should be able to:

- embrace and practice constitutional, humanistic, ethical, and moral values in life, including universal human values of truth, righteous conduct, peace, love, nonviolence, scientific temper, citizenship values,
- practice responsible global citizenship required for responding to contemporary global challenges, enabling learners to become aware of and understand global issues and to become active promoters of more peaceful, tolerant, inclusive, secure, and sustainable societies,
- formulate a position/argument about an ethical issue from multiple perspectives
- identify ethical issues related to work, and follow ethical practices, including avoiding unethical behaviour such as fabrication, falsification or misrepresentation of data, or committing plagiarism, and adhering to intellectual property rights,
- recognize environmental and sustainability issues, and participate in actions to promote sustainable development.
- adopt objective, unbiased, and truthful actions in all aspects of work,
- instill integrity and identify ethical issues related to work, and follow ethical practices.

## Autonomy, responsibility, and accountability: The graduate should be able to:

- apply knowledge, understanding, and/or skills with an appropriate degree of independence relevant to the level of the qualification,
- work independently, identify appropriate resources required for a project, andmanage a project through to completion,
- exercise responsibility and demonstrate accountability in applying knowledge and/or skills in work and/or learning contexts appropriate for the level of the qualification, including ensuring safety and security at workplaces.

**Environmental awareness and action:** The graduate should be able to demonstrate the acquisition of and ability to apply the knowledge, skills, attitudes, and values required to take appropriate actions for:

- mitigating the effects of environmental degradation, climate change, and pollution,
- effective waste management, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living.

#### **Community engagement and service:** The graduate should be able to:

• demonstrate the capability to participate in community-engaged services/ activities for promoting the well-being of society.

**Empathy:** The graduate should be able to:

•	demonstrate the ability to identify with or understand the perspective, experiences, or
	points of view of another individual or group, and to identify and understand other
	people's emotions

(Adopted from UGC)