



Risk Management Handbook

For

College of Engineering

Prepared by

Prof. Omer Aga
Dr. Muhammad Saleem

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Risk Management Committee Members of College of Engineering

1. Prof. Dr. Ömer AĞA
2. Dr. Muhammad Saleem

Representatives of Deanship of Quality & Academic Accreditation IAU

1. Dr. Abdelgadir Mudawi Mohamed
2. Dr. Mohammed Suleiman M. Gibreel

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Dean`s Welcome

The College of Engineering at Imam Abdulrahman bin Faisal University is characterized by its vision to offer unique degree programs not available anywhere else in the Kingdom of Saudi Arabia (KSA) or the Gulf countries, meeting the constantly changing needs of the marketplace. The College currently offers non-traditional engineering degrees in Construction Engineering, Environmental Engineering, Energy Engineering, Transportation and Traffic Engineering and Biomedical (available for girls). Other degree programs such as: Infrastructure Engineering, Structural, Maritime Engineering Security and Safety Engineering are currently in the planning stages.



Since its establishment in 1429/1430 H, the College has started with construction and environmental engineering programs addressing the current development in the Kingdom and that it is expected in the future. Construction engineering specialization provides engineers who are able to manage and supervise construction projects of all types in design and construction stages, both in design offices and in construction sites. While the environmental engineering specialization is concerned with the negative effects of industry and construction on the environment, and trials to avoid or reduce them so that projects take into account environmental controls according to sustainability criteria.

The specialization of biomedical engineering for female students was added in the academic year 1433 / 1432H. This is to prepare and qualify female engineers to be able to deal with design and improvement of equipment, devices and machines available in hospitals, in the hope that this specialization will be highly welcomed by the medical sectors in the Kingdom and abroad.

In the year 1435/1436, the first batch of students in the field of transportation and traffic engineering came from the need to control traffic problems such as traffic congestion, environmental pollution and poor traffic safety on road networks where traffic accidents are a phenomenon that affects all sectors of society and causes humanitarian suffering with its impact on individuals, loss of life and property.

In order to achieve the vision of the Kingdom of Saudi Arabia (Vision 2030), which aims to increase energy production in order to achieve growth and prosperity for industry and the national economy, the College started the program of energy engineering in 1438/1439. This specialization is concerned with qualification of engineers to work on design, construction, operation and

maintenance of various traditional, nuclear and renewable energy systems from wind and solar energy, as well as working on energy conservation systems and integration of renewable energy systems with traditional systems.

In 1438/1439, the College of Engineering launched its first graduate program with a Master of Engineering Management, which is available to those who are distinguished and interested in completing their educational journey from all engineering programs with all its different disciplines. There are also graduate programs in preparation, including postgraduate diplomas, master's and doctorate degrees.

Dr. Othman Subhi D. Alshamrani

Dean, College of Engineering

General Overview

SHORT HISTORY

Universities are excelling for their prediction to market and community requirements. The college of engineering at Imam Abdulrahman Bin Faisal University (IAU) is a crispy clear portrait for the response of IAU to such national market needs. The college of engineering emerged with its unique, unconventional and unique specializations compared to other universities in the Kingdom, dictated by necessities to respond to the ever changing market requirements. Examples of these specializations are: Construction Engineering, Environmental Engineering, Biomedical Engineering, Transportation and Traffic Engineering, Energy Engineering, Maritime Engineering, Safety Engineering and Mechatronics Engineering . The increasing demand for all of these specializations cannot be fulfilled except through nationals who are sincere to the future of the country and who could contribute in adopting technologies and transferring experiences. Such inspirations are reflected in KSA Vision 2030.

Environmental Engineering and Construction Engineering, the first two specializations provided by the college launched in the academic year 1429/1430H (2009/2010G), are crucially needed in order to cope with persisting necessities due to the development the Kingdom is facing nowadays and which is expected to flourish in the future. Environmental engineering focuses on application of fundamentals of engineering sciences towards improvement of the environment (air, water and earth resources) for provision of potable and palatable water, clean air and useful land to be used by man and other living organisms and for treatment of polluted areas. Construction engineering avails competent engineers to efficiently supervise all types of construction projects at their stages of design and execution both in the office and field.

Biomedical Engineering for female students was introduced in the academic year 1432H (2011G), which deals with equipment, instrument design and operation in the medical sector. Traffic and transportation engineering started in 1435H (2013G) to handle all types of ground transportation infrastructure and systems (railway, highway, and airports).

The first group of students admitted to College of Engineering initially consisted of 75 students and it esclated within the past yesars to Three groups of students with B.Sc. in construction engineering and environmental engineering have graduated so far (1436H/2015G), while the first group of biomedical engineering graduated in the summer of 1437H (2016G). The total number of students in the college, according to 1438H (2017G), statistics is 395 students distributed among four levels.

There are forty two faculty members, twenty six lecturers, sixteen teaching assistants, and seven laboratory technicians in the college according to 1437H (2015G) statistics. College

administration and male-classes are located in the new college building within the eastern campus of the university while female classes and small-scale laboratories are located in building 800. Large-scale laboratories are located in Gashler campus. New laboratory sites are under preparation to accommodate departmental facilities within the new building premises.



Ever since the college started, it has adopted the mechanism and procedures of the National Commission for Academic Accreditation and Assessment (NCAAA)¹ in addition to the procedures of the American Accreditation Board for Engineering and Technology (ABET). The college also accommodates several basic sciences and specialized educational and research labs.



¹ <http://www.ncaaa.org.sa/en/Pages/default.aspx>

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY VISION, MISSION AND VALUES

- **Imam Abdulrahman Bin Faisal University Vision**
A leading University achieving distinction nationally, regionally and internationally
- **Imam Abdulrahman Bin Faisal University Mission**
Providing creative knowledge, research, and professional services with effective community partnerships
- **Imam Abdulrahman Bin Faisal University Values**
Loyalty, Excellence, Teamwork, Transparency, Diversity, Creativity and Social Responsibility



COLLEGE OF ENGINEERING, VISION, GOALS, VALUES AND OBJECTIVES

- **College of Engineering Vision**
A leading college offering distinctive engineering programs that contributes to achieving Saudi Arabia's Vision 2030.
- **College of Engineering Mission**
Integrating excellence and sustainability in education, research, and community partnership to graduate skillful and economic-driven engineers.

- **College of Engineering Goals**

In order to accomplish the vision, mission, and values, the college of engineering has set the following goals for risk management:

- 1) Achieve excellence in teaching and research by recruiting distinguished faculty members,
- 2) Provide safe, healthy, comfortable, and productive environment for effective learning and teaching,
- 3) Create a motivating environment to carry out a high-quality research utilizing well-equipped laboratories
- 4) Establish partnerships with academia, industry, and government for training and professional practice,
- 5) Graduate skillful engineers with technical, communication and leadership skills to pursue careers and graduate studies.



- **COLLEGE OF ENGINEERING VALUES**

College values are sought from Islam and from the guidance of the Prophet Mohammed Peace be upon Him who was described in Quran as being "You are a model of perfect manners" and whom was reported to have said "I was sent to complete good manners". The College seeks to educate an engineer who enjoys honesty, faithfulness, punctuality at work, evenness, safety, truthfulness with oneself and with his/her companions, mercy with people who work with him/her whatever their status is. The College also seeks to inject professional manners, and adopt sustainable development in designs and projects supervised by them.

- **COLLEGE OF ENGINEERING OBJECTIVES**

College objectives can be summarized in implementing engineering strategies and regulations set in Saudi Arabia, rooting sense of responsibility to profession and to society in a sustainable format, graduating professional engineers with different specialties, providing state needs of qualified engineers, offering market needs and requirements, developing scientific

research strategy around pressing issues, availing engineering community education and awareness, launching specialized conferences and seminars to address local requirements and regional needs, and graduating candidates, who can apply knowledge of mathematics, science, and engineering skills, use modern engineering tools, able to design and conduct experiments, analyze and interpret data in various engineering disciplines. Added objectives are graduating candidates who are able to communicate effectively orally, graphically and in writing.

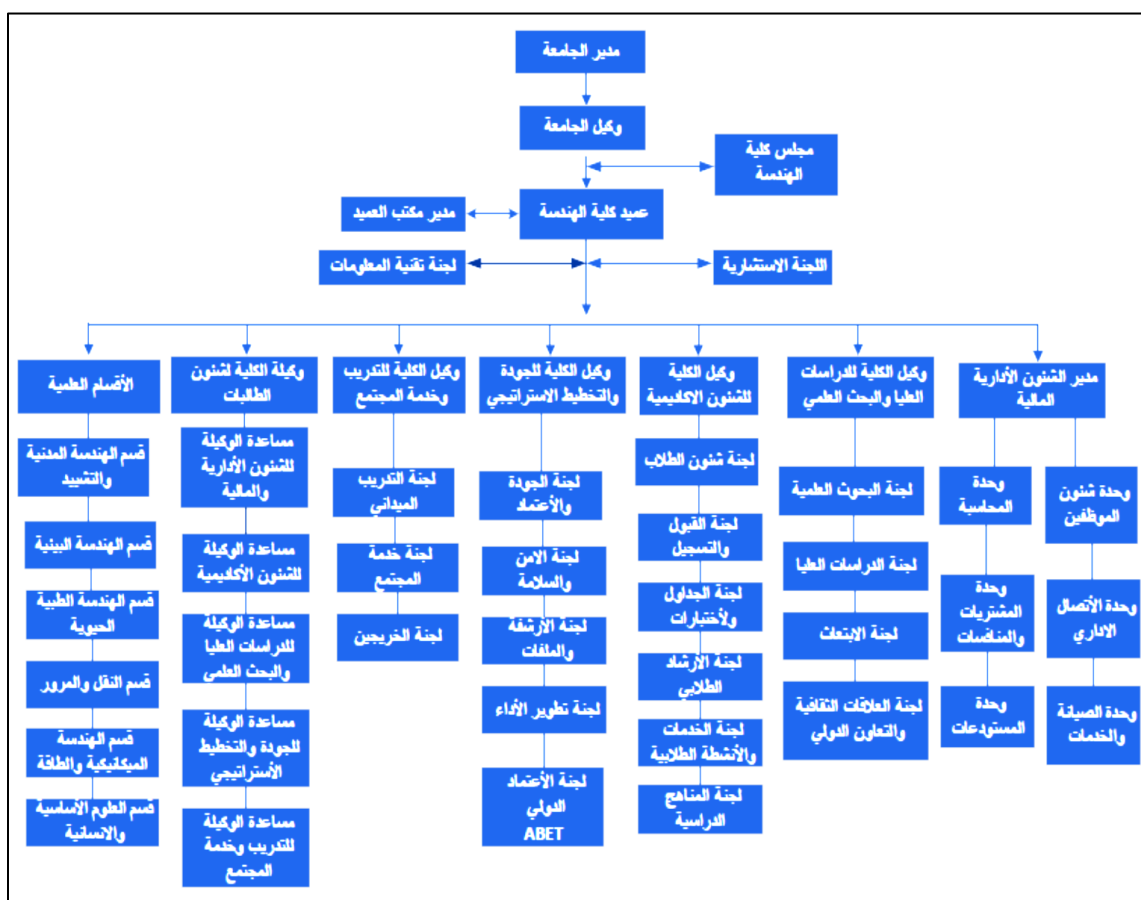


1. INTRODUCTION TO RISK MANAGEMENT

Risk taking, the engine driving business worldwide, is vital to higher education institutions

seeking high reputation and sustainable success. Institutions of all types and sizes face internal and external factors that make them uncertain whether and when they will achieve their mission and objectives. Universities are no exception, like every business the University faces numerous risks.

2. AUTHORITY AND LEADERSHIP - ORGANIZATION CHART OF COLLEGE OF ENGINEERING



IAU Risk Management Policy Statement

The Imam Abdulrahman bin Faisal University considers risk management as fundamental mechanism to good management practice, decision making and a significant tool for corporate governance. Effective management of risk will provide an essential contribution towards the achievement of the University's strategic and operational goals and objectives. Moreover, IAU Risk management system is an integral part of the University's decision-making and routine management. It must be incorporated within the strategic and operational planning processes

3. PURPOSE

This risk management handbook and plan documents the processes, tools and procedures that will be used to manage and control those events that could have a negative impact on CoE.

4. RISK MANAGEMENT OBJECTIVES

Risk Management goals and objectives should be consistent with and supportive to IAU mission and objectives. The CoE's risk management objectives are to:

1. Enhance the achievement of CoE strategic objectives
2. Create a proactive plan to protect CoE people and property
3. Identify and manage existing and new risks in a planned and coordinated manner.
4. Develop a risk aware culture that encourages all staff to identify risks and associated opportunities and to respond to them with cost effective actions in a timely manner.
5. Ensure safety of clients, counselors, staff and visitors.

5. RISK MANAGEMENT PRINCIPLES:

For risk management to be effective, CoE is committed, at all levels, to comply with the following 11 risk management principles(as shown on table 1 below), underpins effective risk management, so as to insure sustained results:

No.	Principle of risk management	UOD Compliance with the principles will deliver or ensure that:
a)	Risk management creates and protects value.	The UOD can demonstrably pursue its strategic objectives in research, learning and teaching, community service undertakings and community engagement.
b)	Risk management is an integral part of all organizational processes.	Risk management principles and practices are embedded into governance, enterprise and operational strategy, planning and management, policies, values and culture.
c)	Risk management is part of decision-making.	UOD individuals recognizes the statutory mandate for risk management that is led by the University Council, the President, the Vice President, Vice President for Studies Development & Community Service, the Vice President for Academic Affairs, the Vice President for Post Graduate Studies & Scientific Research, the Vice President for branches, King Fahad Hospital of the University and senior executive so that all decision-makers make informed choices, prioritize actions and recognize options and alternative courses of action and their consequences.
d)	Risk management explicitly addresses uncertainty.	In taking account of uncertainty, UOD decision-makers have regard for context and use knowledge, evidence and judgment to treat or mitigate risk.

Risk Management Handbook – College of Engineering

No.	Principle of risk management	UOD Compliance with the principles will deliver or ensure that:
e)	Risk management is systematic, structured and timely.	The University can demonstrably pursue its strategic objectives in research, learning and teaching, commercial undertakings and community service to achieve consistent, comparable and reliable results.
f)	Risk management is based on the best available information.	In using their judgment and discernment, UOD decision-makers will consider available information, experience, forecasts and stakeholder feedback.
g)	Risk management is tailored.	UOD Decision-makers consider the statutory and operational mandates, requirements and expectations of internal and external regulators, auditors, funders, governing authorities and agencies; and account for the University's strategic plans, risk profile and undertakings.
h)	Risk management takes human and cultural factors into account.	The UOD recognizes the capabilities, perceptions and intentions of external and internal people and communities that can facilitate or hinder the achievement of the University's objectives.
i)	Risk management is transparent and inclusive.	The UOD engages with internal and external stakeholders and decision makers to ensure that risk management remains relevant and up to date.
j)	Risk management is dynamic, iterative and responsive to change.	The UOD responds to the changing needs of the higher education sector, the student community, staff and business partners by continually self-assessing, monitoring and reviewing its risk profile and identifying new and emerging risks.
k)	Risk management facilitates continual improvement of the organization.	Through the application of ISO 31000:2009 risk management principles and guidelines in all relevant area, the culture of risk management will continue to grow and mature across all areas of the University. In order for the University to meet its statutory obligations, all occupational health and safety incidents, injuries, hazards, near-misses and concerns, are reported to, recorded, assessed and managed by the Health Safety and Wellbeing team in the Human Resources Branch using its systems and processes.

6. SCOPE

CoE risk management plan covers all services provided by the College. It identifies and manages the risks that threaten the ability of CoE to meet its objectives. CoE will identify, monitor and aim to eliminate the range of threats to its activities, and develop cost effective control measures. These risks may be strategic, operational, compliance or financial.

7. CoE APPROACH TO RISK MANAGEMENT

The following key principles outline the CoE's approach to risk management and internal control and aims to:

- Embed risk management throughout all professional service areas at all levels,
- Relate all risk to the aims and objectives of the College,
- Devolve responsibility for risk management within the College,
- Use a consistent and transparent approach to risk.
- Ensure that risks are identified and closely monitored on a regular basis at all levels.

8. LINES OF RESPONSIBILITY

○ DEAN OF ACADEMIC AFFAIRS

- To ensure that risk management is embedded in existing management processes.
- Approve the recommendations and action plan generated by the RCA Team.

○ CoE DIRECTOR

- Manage and mitigate against those risks under their responsibility.

○ RISK MANAGEMENT COORDINATORS

- Receive and organize data from risk identification.
- Report and discuss adverse events or trends regarding potential risk management/loss prevention and control issues with the head of risk management unit. Take appropriate action and report results.
- Assist in the facilitation and completion of the investigation of a Sentinel event, ensuring that findings are submitted in a timely manner. Address the root causes of the Sentinel Event, and that an appropriate action is identified and implemented, as directed, by the quality and development officer.
- Organize and submit a quarterly summary Risk Management report to the CoE Director; Patient safety and Risk Management Committee and the quality officer.
- Organize and present continuous reviews to the CoE counselors and employees about the responsibilities related to the Risk Management Program. Address related interim educational needs when identified.

○ CoE Faculty & STAFF

- Understand their accountability for individual risks
- Understand how they can enable continuous improvement of risk management and risk awareness
- Report systematically and promptly to a member of the CoE Management Team or Senior Management Team any perceived new risks or failures of existing control measures

9. RISK MANAGEMENT SYSTEM

As part of the IAU risk management framework, the CoE risk management plan consists of components which are intended to assist CoE with getting risk management right.

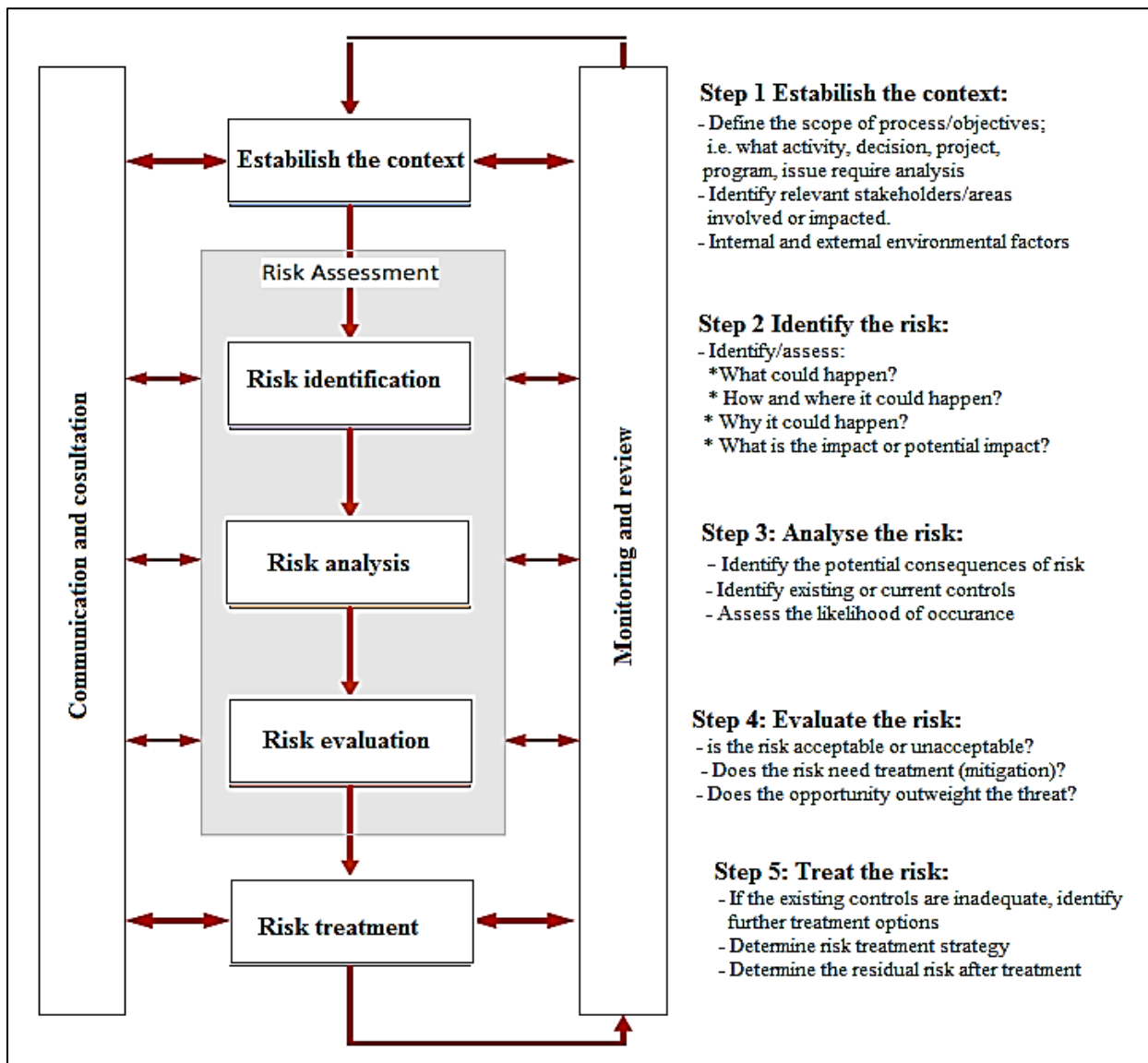
These components are:

- The Risk Management Process;
- Risk register
- Incident Reporting;
- Risk Awareness and
- Health, Safety and Environment Monitoring

9.1. THE RISK MANAGEMENT PROCESS

The risk management process is designed to ensure a robust approach to informed decision-making, consistent assessments, and that a common language is used and understood across CoE. Consistent with ISO 31000, the risk management process consists of five steps as outlined below.

IAU Risk Management Process



8.1.1 Establishing the Context

When creating, developing, and implementing a risk management system, it is essential to establish the College's context of the risk strategy in terms of internal and external factors, risk type, measurement plans, and appropriate processes.

Establishing the CoE context can be summarized as follows

- Define the scope of processes / objectives i.e. what activity, decision, projects require analysis.
- Identify students, employers, government and society, faculty members and other relevant stakeholders/ areas involved or impacted.
- Identify internal and external factors (physical, psychological, emotional, ethical, operational, reputational, financial, information, compliance).
- Resources, including accountability and responsibilities
- Records, including where they are kept and a standard reporting process

PURPOSE:

- Understand factors influencing the ability of the College to achieve objectives
- Define risk criteria to ensure risks are assessed in a consistent manner.

Through establishing the context, CoE will be able to identify its risk management scope, articulate its risk objectives, define the internal and external parameters to be taken into account when managing risk and set the risk management criteria.

8.1.2 Identifying Risks:

Risk is defined as the effect of uncertainty on the achievement of objectives. Using CoE strategy and objectives of a team, the College as a starting point, the risks to meeting these objectives can then be identified. Managing risks is an integral part of the planning process and it is important that risks are considered as plans are defined and developed:

- Identifying risks, their sources, causes and potential consequences.
- To generate a comprehensive list of threats and opportunities based on those events that might enhance, prevent, degrade, accelerate or delay the achievement of objectives.

There are a range of different methods for identifying risks and the method used depends on preference of the department. Some suggested methods include:

- A workshop with the Executive Team to discuss objectives of the University Counselling College and the risks to meeting them.

- A Brainstorming and SWOT analysis sessions for identifying the strengths, weaknesses, opportunities and threats facing a department. This analysis can then help to explore which areas would affect the achievement of the department's objectives and help to define the risk faced.
- A Cause and Effect Analysis. This can be done by taking each of the department's objectives and identifying issues (both positive and negative) that may impact on the objectives. The causes and effects of each problem can then be analysed further to identify the risks involved in meeting the objectives.

Based on the above, the following eight (8) risk categories were identified:

- Legal and compliance risks
- Financial risks
- Human resource risks (faculty and staff)
- Risks related to buildings and facilities
- Risk related to health and safety of student, faculty, staff and college's visitor (injury, fall, fire, etc.)
- Reputation risks
- Strategic risks
- Risks of Information systems and Electronic Systems

8.1.3. Risk Analysis

- Assess the potential consequences of risk and likelihood of occurrence (Table 1)
- Identify the severity of the risk (likelihood \times consequences) based on the IAU risk criteria (Appendix 1)
- Assist with identifying ineffective controls.
- Inform risk evaluation and guide risk treatment.

Table 1: CoE Risk Rating Scale

Likelihood		consequence (impact)	
Almost certain	5	Catastrophic (Severe)	5
Likely	4	Major	4
Possible	3	Moderate	3
Unlikely	2	Minor	2
Rare	1	Insignificant	1

Risks of CoE were analyzed as follows:

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	Risk	Likelihood	Severity/ Impact	Risk Rating	Risk Control
1	Legal and compliance risks	1	3	3	Continuous auditing for any program approval or execution to avoid violation of law, EEC and NCAAA regulations and IAU policies to reduce exposure to fines, penalties, lawsuits, reduced future funding, imposed compliance settlements, injury, etc.
2	Financial risks	2	3	Medium	University budget allocated for CoE is currently enough, however CoE put in place objectives and projects to diversify sources of income to cater for any short in funding.
3	Human resource risks (faculty and staff)	1	3	Low	CoE regularly assess HR turnover and satisfaction level to have early warning if any risk emerges and a contingency treatment plan.
4	Risks related to buildings and facilities	1	1	Very Low	This risk is monitored by Directorate for the University Campus. The role of the college of Engineering is monitoring and reporting any incident that may occur.
5	Risk related to health and safety of student, faculty, staff and college's visitor (injury, fall, fire, etc.)	3	4	High	CoE complies with the IAU's policies and procedures in place to minimize the risk and report to responsible departments when needed. CoE has set a safety manual for laboratories. CoE also have a periodical health and safety inspection according to a predetermined checklist.
6	Reputation risks	2	4	Medium	Part of the reputation risks is monitored and controlled in cooperation with Public Relation and Information Directorate. The college has many tools to assess and control reputation risk in society or information media such questionnaires directed to the various stakeholders.
7	Strategic risks	2	4	Medium	Impacts related to CoE's ability to achieve its strategic goals and objectives, and projects. Risk assessment and control is embedded in each project management.

8	Risks of Information systems and Electronic Systems	3	4	High	This include various types of risks such as hacking, viruses, use of non-genuine versions of programs, failure of hardware or software , loosing data, etc. These risks are directly handled from the deanship of communication and information technology. The role of CoE is to monitor and report any risk incident.
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8.1.4. Risk Evaluation

- Determine whether the controlled risk is acceptable using the Risk Assessment Matrix (Table 2).
- Determine if controlled risks need further treatment.
- Identify priority order in which individual risks should be treated.
- Explore possible options for eliminating or minimizing the risk.

Table 2: CoE Risk Heat Map

RISK ASSESSMENT MATRIX					
Likelihood	Impact / Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Medium	Medium	High	Critical	Critical
Likely	Low	Medium	High	High	Critical
Possible	Low	Low	Medium	High	High
Unlikely	Very Low	Low	Medium	Medium	High
Rare	Very Low	Very Low	Low	Medium	Medium

9. Risk Treatment and response

Risk response should cover both opportunities and threats. However, in selecting the risk response we should:

- Select the most feasible and cost-effective options for risk treatment (avoid, mitigate, transfer or accept).
- Development of strategies for implementation of selected options.
- Implement risk elimination or minimization strategies.

10. Monitoring and Review

- Review and Revision of Risks and Control Measures.
- Ensure that controls are effective and efficient in both design and operation.
- Re-consideration of context and potential risks.
- Obtain further information to improve risk assessment.
- Re-analysis of risks and potential control measures.
- Review of risk treatment strategies.
- Implementation of results of re-consideration, re-analysis and review.

11. Communication and Consultation

- Building commitment within the College to the Risk Management Plan.
- Using the collective wisdom of those associated with the College to identify potential risks and options for elimination or minimization of risks.
- Ensuring that any incidents are reported, recorded, and analyzed with identified risks addressed.
- Continuing training and instruction in safe work and operational practices for residents, staff, contractors, voluntary workers and visitors.

9.2. Risk Register

- Risk registers are used to record the opportunities, threats and risks at each stage of this process and to provide the on-going action plans to address the risks.
- Risks can be identified at any time throughout the year and should therefore be added to the register when identified.

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Information from the risk management process is recorded, reported and monitored using the College's risk register

- The risk register lists all the identified risks, their scores in terms of likelihood of occurring and seriousness of impact, initial plans for mitigating severe risk, and subsequent results.
- The risk register enables CoE to document, manage, monitor, review and update risk information in alignment with the strategic plan and operational plans.
- It usually includes:
 - A unique identifier for each risk
 - A description of each risk and how it will affect the project
 - An assessment of the likelihood it will occur and the impact if it does
 - An outline of proposed control actions (preventative and contingency).
 - Who is responsible for managing the risk.
- The rankings shown on the risk register range from one (1) to five (5) against each criteria of likelihood and impact. The likelihood and impact scoring is multiplied

together to provide the Severity score.

- Severe Risks are identified as those risks with a Severity score of 20 or more. Any severe risks and any risk where existing controls are assessed as inadequate should be reported to the Director for reporting to the concerned department.
- The risk register will form part of the planning process for each service area within CoE.
- The register should be reviewed at least twice a year (including consideration of new risks) by the risk owners.

8.3. INCIDENT REPORTING

- All incidents must be reported. An Incident Report (Attachment 1) must be completed whenever an incident occurs and submitted to the CoE Risk Management Coordinators.
- Corrective and preventive actions should be identified and executed for all severe, high or moderate risks according to the policy and procedure.
- Attachment 2 shows the policy and procedure for incident reporting as required by the Risk Management Unit-DQAA.

8.4. BUILDING RISK AWARENESS

- CoE must build counselor and staff awareness and develop skills in getting risk management right. This increased awareness and understanding provides director, counselors, and staff with greater self – confidence and willingness to take responsibility for the management of risk across CoE.
- To facilitate the Risk Management Unit - DQAA is working on developing various training and development tools and products to improve their risk management awareness.

8.5 HEALTH, SAFETY AND ENVIRONMENT MONITORING

To minimize hazards to clients, counselors, staff and visitors, the College should carry out a systematic and periodic inspection to health, safety and environment. A checklist tool that includes hazard factors in environment, fire safety, first kits for accidents and personal protective equipment (PPE) is prepared for this purpose. The checklist sheet and inspection flowchart are attached.

APPENDICIES

Glossary Terms

Risk	The effect of uncertainty on the achievement of objectives.
Risk Management	coordinated activities to direct and control an organization with regard to risk
Risk Assessment	Overall process of risk identification, analysis and evaluation
risk management framework	set of components that provide the foundations and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organization
risk management policy	statement of the overall intentions and direction of an organization related to risk management
risk management plan	scheme within the risk management framework specifying the approach, the management components and resources to be applied to the management of risk
Risk Description	A structured description of a risk which separates cause, event and consequences. It is an elaboration of the short-form risk event title, intended to provide a short summary of the risk.
Risk Event	An uncertain future event or circumstance that could significantly affect the achievement of an objective.
Risk Identification	The process of finding, recognizing and describing risks.
Control	A control is any measure, operated by the Company, intended to modify a risk.
Heat Map	A matrix on which the level of risk consequence and likelihood are plotted to determine risk severity.
Likelihood	The chance of the credible worst case risk event occurring.
Near miss	An event or situation that could have resulted in an accident, injury, or illness but did not, either by chance or through timely intervention.
Risk Analysis	The process of understanding the nature of a risk and determining the level of consequence and likelihood.
Risk Assessment Matrix	A tool that combines a heat map with criteria for risk analysis.
Risk Management Administrator	Person responsible for administering an organization's overall risk management framework.
Risk Coordinator	Person responsible for administering risk management activities for a specific risk on behalf of a risk owner.
Risk Score	A score, based on a combination of consequence and likelihood and derived from the risk heat map, representing level or magnitude of risk, and used primarily to prioritize risks.
Risk Owner	person or entity with the accountability and authority to manage a risk
Risk Evaluation	The process of identifying the objective for managing a risk, and then devising the strategy by which to achieve it.
Risk Treatment	The process of selecting and implementing or modifying controls to manage risk.
Monitor	The process of continual checking, critically observing, or determining the status of a risk, control or risk management process in order to identify needed change.
Review	An activity to determine the suitability, adequacy and effectiveness of what is being done by the entity to achieve risk management objectives.

Checklist of Health, Safety and Environment

The main objectives for managing risks are to:

- Assist the University in achieving its academic, operational, and strategic objectives;
- Safeguard the University's assets—human, financial, reputational, physical, and information;
- Create an environment where members of the University community assume responsibility for risk management.

This checklist is designed to enable identifying hazards, inspection and audit of health, safety and environment as part of IAU risk management plan where applicable.

Items	Please Tick ✓			Findings and comments
	Yeas	No	N/A ²	
Health and environment				
Have all hazardous substances and tools been identified and a written assessment carried out (medical, biological, chemical, etc.)				
Are appropriate washing and sanitary facilities provided and work effectively for (Please tick):				
▪ Students				
▪ Faculty and staff				
▪ Clients				
▪ Disabled persons				
▪ Subcontractors, visitors, etc.				
Health and safety notices are displayed in place such as:				
▪ First aid signs (First aid, emergency shower, emergency breathing apparatus)				
▪ Fire safety signs (fire alarm, exits and evacuation signs, fire hydrant and hose reel)				
▪ Fall and Trip Hazards signs (wet or slippery, watch your step)				
▪ Danger signs (Electrical Hazards signs, no smoking, flammable material signs, hazardous substance)				

² N/A: Not applicable

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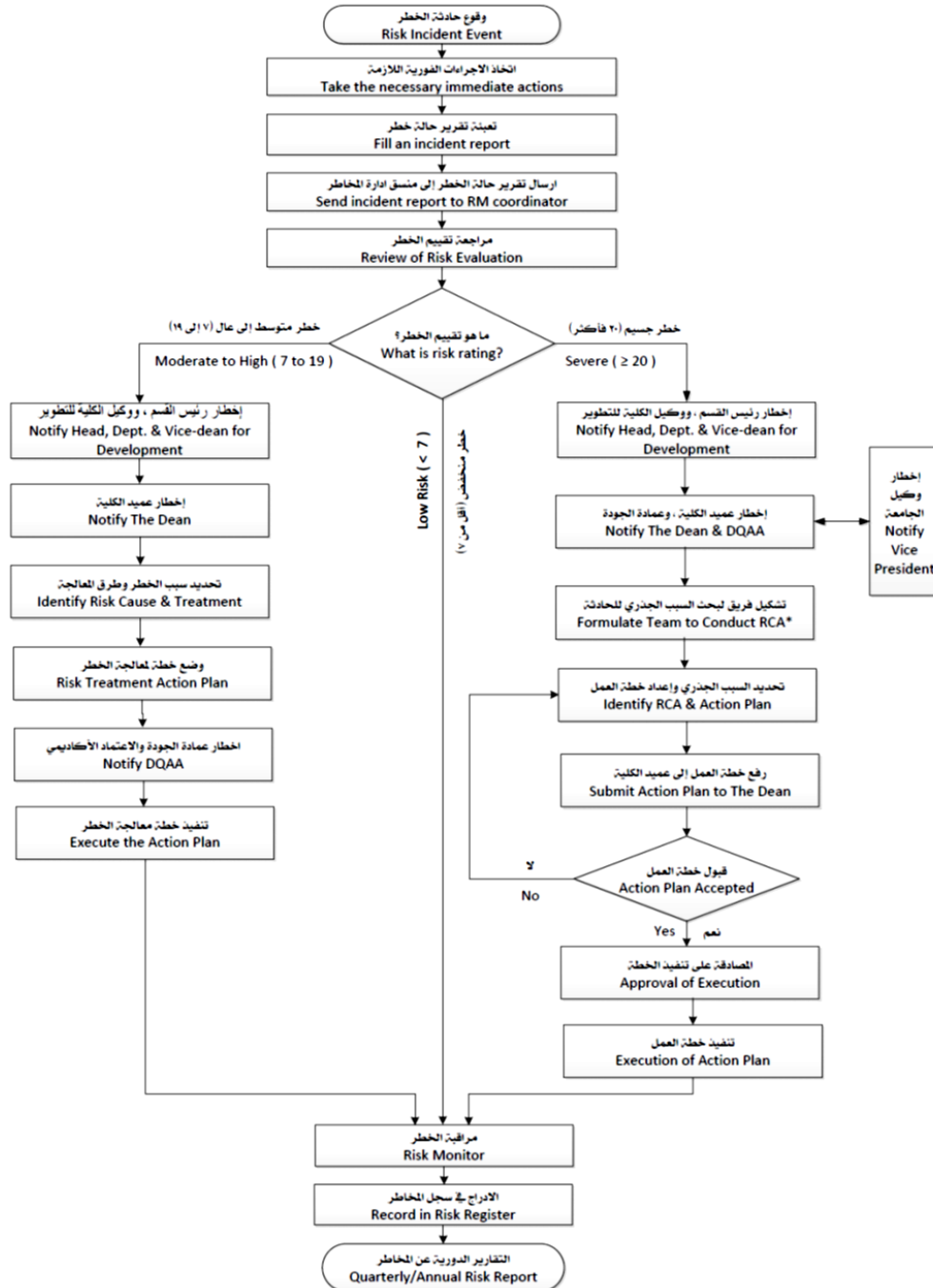
Items	Please Tick ✓			Findings and comments
	Yeas	No	N/A ²	
▪ Prohibition (No entry, no smoking, authorized persons only)				
▪ Construction site signs (Keep out signs, hard hat or PPE area)				
▪ Maps and directions (Emergency exits, stair case way)				
Are all areas ventilated sufficiently				
Are all lights sufficient, good and repaired within a reasonable time				
Do you have waste management policy and procedure.				
Fire safety				
Fire alarm system is tested and well-functioning				
Is the fire alarm and smoke detection is tested periodically and are the records available				
Fire extinguishers are properly provided/installed				
Fire extinguishers are tagged with current inspection				
Fire extinguishers and fire hoses are unobstructed				
Have all staff received adequate instruction, training and information on using fire extinguishers and first aid kit?				
Has fire evacuation drill been carried out within the last 12 months				
▪ Has records of all fire drills been kept				
Are stairs and slopes in good condition and have secured hand rails fitted				
Accidents and first aid				
Do you have first aid box that is correctly stocked and readily available				
Are all electrical sockets, switches and wiring in good repair				
Are all corridors and passageways free from obstruction, slips, trips and fall hazards				
Personal Protective Equipment (PPE)				
Do all staff have suitable and sufficient PPE to deal with infectious and hazardous substances				
Are staff and involved students provided with any PPE: if yes please tick				
▪ Gloves				
▪ Overall				
▪ Safety footwear				

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Items	Please Tick ✓			Findings and comments
	Yeas	No	N/A ²	
▪ Safety helmets				
▪ Safety goggles				
▪ Face/dust masks				
▪ Respiratory equipment				
▪ Other (please state)				
Are arrangements for storage, cleaning, or disposal of contaminated PPE adequate				
Are all staff and students involved aware of when and how to use PPE				
Has anyone has been identified to monitor PPE use				

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عمادة الجودة والاعتماد الأكاديمي
DEANSHIP OF QUALITY & ACADEMIC ACCREDITATION
وحدة إدارة المخاطر
RISK MANAGEMENT UNIT



* RCA: Root Cause Analysis

كلية/عمادة/إدارة التاريخ:.....

قائمة الفحص نصف السنوية للصحة والسلامة والبيئة

هذه القائمة تم تصميمها للمساعدة في تحديد مصدر الخطر ومراجعة متطلبات الصحة والسلامة والبيئة كجزء من إدارة المخاطر بجامعة الإمام عبدالرحمن بن فيصل، حيثما كان ذلك ينطبق.

العناصر	الرجاء وضع علامة ✓			ملاحظات وتوصيات
	نعم	لا	لا ينطبق	
الصحة والبيئة				
هل تم تحديد المواد والمعدات التي تشكل مصدرا للخطر؟ وهل تم تقييم موثوق لهذه المخاطر (الصحية، الكيميائية، البيولوجية، المعامل، .. الخ)				
هل تم توفير مرافق النظافة ودورات المياه بطريقة مناسبة وتعمل بصورة جديدة لكل من (ضع علامة ✓): - الطلبة (أو المرضى) - هيئة التدريس والموظفين - ذوي الاحتياجات الخاصة - المقاولون والزوار.				
السلامة من الحرائق				
هل يتم اختبار أنظمة الانذار للحرائق دورياً؟				
هل هي تعمل بصورة جيدة؟ تحتاج صيانة أو تغيير؟				
هل يتم اختبار أجهزة استشعار الدخان دورياً؟ وهل هناك سجل لهذه الاختبارات؟				
هل تم توفير أنابيب إطفاء الحرائق المناسبة؟ هل هي كافية؟ هل تم تثبيتها في مكان بارز؟				
هل هناك ديباجات توضح مواصفات وتاريخ فحص هذه الاسطوانات؟				
هل هناك عوائق تحول دون الوصول السريع لأنابيب الإطفاء أو الخراطيم؟				
هل تلقى الأفراد العاملون التعليمات والتدريب المناسب لاستخدام أجهزة الإطفاء وأدوات الاسعافات الأولية؟				
هل تم تنفيذ خطة إخلاء طارئة خلال هذه السنة (١٢ شهر من الآن)؟ ○ هل يتم الاحتفاظ بالسجلات وتقارير خطة الإخلاء؟				
هل السلام والمنحدرات بحالة جيدة وبها حواجز ومماسك جيدة تقي من السقوط؟				
الحوادث والاسعافات الأولية				
هل يوجد صندوق للإسعافات الأولية؟ هل هو معبأ بطريقة مناسبة ومتاح في كل وقت؟				
هل كل القوايس الكهربائية والمفاتيح والأسلاك يتم مراجعتها وصيانتها بطريقة دورية؟				
وضع إرشادات وعلامات السلامة في موضع بارزة				
هل يتم وضع إرشادات وعلامات السلامة في موضع بارزة؟ الرجاء وضع علامة في المكان المناسب: ○ علامة الاسعافات الأولية (صندوق الاسعافات الأولية، غسالة وجه -طوارئ- ، أجهزة التنفس الخ)				

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ملاحظات وتوصيات	الرجاء وضع علامة ✓			العناصر
	لا ينطبق	لا	نعم	
				○ علامات السلامة من الحريق (إنذار الحريق، علامات الخروج والإخلاء، خراطيم المياه والبكرات)
				○ علامات مخاطر التعثر أو السقوط (أرضية مبللة، هبوط مفاجئ، راقب خطواتك، الخ)
				○ علامة خطر جسيم (خطر كعربائي، مواد قابلة للاشتعال، ممنوع التدخين هنا، المواد الخطرة)
				○ علامات المنع (ممنوع: الدخول، التدخين، الأشخاص المصرح لهم فقط، الخ)
				○ علامات مواقع البناء (الابتعاد عن هنا، لبس القبعات الواقية، لبس أجهزة الحماية الشخصية، الخ)
				○ خرائط المواقع والاتجاهات (اتجاه الخروج، الطريق إلى الدرج، أين أنا؟)
				○ هل تم تهوية كل الغرف والقاعات والمعامل بصورة كافية؟
				○ هل الإضاءة كافية؟ جيدة وتتم صيانتها في وقت معقول؟
				○ هل توجد سياسة وإجراءات للتعامل مع النفايات؟ وخصوصاً النفايات الخطرة؟
أجهزة الحماية الشخصية				
				■ هل تتوفر لكل العاملين أدوات الحماية الشخصية المناسبة للتعامل مع المواد والأشياء الخطرة؟ (التلوث، الكيماويات، الأبخرة .. الخ)
				■ هل كل العاملين وطلاب المعرضين يتم تزويدهم بمعدات الحماية الشخصية التالية؟ الرجاء وضع علامة في المكان المناسب:
				○ القفازات اليدوية
				○ ثياب العمل الواقية
				○ الأحذية الواقية
				○ الخوذات الواقية
				○ النظارات الواقية
				○ كمامات الوجه (الغبار، الأبخرة، ... الخ)
				○ أجهزة التنفس
				○ أخرى (الرجاء ذكرها)
				■ هل هناك ترتيبات لتخزين وتنظيف معدات الحماية الشخصية والتخلص من المتلوث أو التالفة؟
				■ هل تلقى العاملين والطلاب الذين يستخدمون معدات الحماية الشخصية شرحاً حول كيفية استخدامها؟
				■ هل هناك شخص محدد تم تكلفه بمراقبة استخدام معدات الحماية الشخصية؟

**COLLEGE OF ENGINEERING
RISK MANAGEMENT TEAM**

Dr. Muhammad SALEEM

Associate Professor

College of Engineering

Email: mssharif@iau.edu.sa

Ext: 31696

Mobile: 058 345 9975

Prof. Omer AGA

Professor

College of Engineering

Email: oaga@iau.edu.sa

Ext: 31682

Mobile: 050 661 6532

*In Consultation with Risk Management Unit,
Deanship of Quality and Academic Accreditation*

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Risk Assessment Form

الكلية College :	التاريخ Date Completed: ____/____/____
القسم Department :	تاريخ المراجعة Review Date: ____/____/____

Risk Identification تحديد المخاطر				تحليل الخطر Risk Analysis			تقييم الخطر Risk Evaluation
الرقم التعريفي للخطر Risk ID	تصنيف الخطر Risk Category	وصف الخطر Risk Description	عواقب حدوث الخطر Risk Consequences	الخطر المبدئي Raw Risk			Severe, Moderate or low
				احتمالية الحدوث Likelihood (L)	حدة العواقب Consequence(C)	Raw Risk (L x C)	

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Risk Management Form

معالجة الخطر Risk Treatment				متابعة ومراجعة الخطر Risk Monitoring and review				
الرقم التعريفي للخطر Risk ID	إجراءات معالجة الخطر Mitigations/ controls to reduce the risk	الشخص المسئول Responsibility	المدة Timeline	تاريخ المراجعة Review date	الخطر بعد المعالجة Residual Risk (RR)			حالة التغيير Status Change
					احتمالية الحدوث Likelihood (L)	حدة العواقب Consequence(C)	Residual Risk (L x C)	