

Programme Specification

Programme Title and Name of Award	MSc Data Analytics		
Academic Level	7	Total Credits	180
Professional Body Accreditation / Qualification	not applicable		
Date of Professional Body Accreditation	not applicable	Accreditation Period	not applicable
UCAS Code	not applicable		
HECoS Code	100370		
Criteria for Admission to the Programme	<p>We welcome applications from students who may not meet the formal entry criteria but who have relevant experience or the ability to pursue the course successfully.</p> <p>The formal entry requirements are:</p> <ul style="list-style-type: none"> • An honours degree at 2:2 or above. • English language at IELTS 6.5 (minimum of 5.5 in each component). <p>Applications are considered from candidates who do not meet the formal entry requirements but can provide evidence of equivalence.</p> <p>Examples of equivalence are:</p> <ul style="list-style-type: none"> • A wide range of professional qualifications and/or work experience. • Working or studying in English or an English-speaking environment. <p>Applications will be considered from candidates who do not meet the formal entry requirements but who can demonstrate by interview the commitment to complete the programme successfully.</p> <p>APL will be considered.</p>		
Teaching Institution	Robert Kennedy College		
Owning University Institute	Business, Industry and Leadership		

Programme delivered in conjunction with	The Programme is delivered by Robert Kennedy College with one module delivered by the University of Cumbria	
Mode of Delivery	Distance learning with one optional module (CRKC7005) delivered face to face	
Pattern of Delivery	Full-time and Part-time	
	Total weeks of study:	52 weeks
	Delivery pattern:	3 x 12 week semesters
	Standard semester dates:	No
Delivery Site(s)	Distance Learning via Robert Kennedy College's OnlineCampus Platform	
Programme Length	Full-time: Standard – 12 months Part-time: Standard – 2 years Maximum Registration - 5 years	
Higher Education Achievement Report (HEAR)	Upon successful completion of this programme, you may receive a Diploma Supplement/Higher Education Achievement Report (HEAR).	
Exit Awards	You may be awarded one of the following Exit Awards if you fail to achieve the requirements of the full programme: - Postgraduate Certificate in Information Management - Postgraduate Diploma in Information Management	
Period of Approval	January 2020 - 2026	

Cumbria Graduate Attributes

Throughout your studies, you will be provided with the skills and knowledge relevant to the global workplace. All successful graduates of the University of Cumbria will be:

- Enquiring and open to change
- Self-reliant, adaptable and flexible
- Confident in your discipline as it develops and changes over time
- Capable of working across disciplines and working well with others
- Confident in your digital capabilities

- Able to manage your own professional and personal development
- A global citizen, socially responsible and aware of the potential contribution of your work to the cultural and economic wellbeing of the community and its impact on the environment
- A leader of people and of places
- Ambitious and proud

Programme Features

Computers and the advent of the Internet have brought upon the world the age of information and big data, and organisations want to retain as much information as possible about their business as they appreciate the role of data in gaining insights and out-thinking competitors. As a result, there is an increasing demand for people who nurture analytical skills and can make educated decisions to promote organisational success. The MSc Data Analytics is designed to accommodate a broad audience of learners whose particular pursuits in data analytics might be either technical or business focused. The programme makes use of academic research, industry-defined practical problems, and case studies, to offer an approach that will genuinely foster a deeper knowledge of the subject area.

The programme also offers a residency, Corporate Strategy and Competitiveness, which can be taken as an option. The module is based on the "Microeconomics of Competitiveness" programme (MoC) developed by Professor Michael Porter using materials developed by the Institute for Strategy and Competitiveness at Harvard Business School. This residential module will help you develop a better understanding of competitiveness, and what drives it, and how industrial clusters can help to improve competitiveness. It focuses especially on the role of business in driving competitiveness and economic prosperity. In modern international competition, the roles of key stakeholders, including companies, government, and NGOs, have shifted and expanded, and the traditional separation between them is seen as working against successful economic development. Moreover, the process of creating and sustaining an economic strategy for a nation or region is a daunting challenge. The course not only explores theory and policy, but also the organisational structures, institutional structures, and change processes required for sustained improvements in competitiveness. It is taught at Harvard Business School to MBA students and to a network of over 120 academic institutions worldwide, within which Robert Kennedy College is the only distance learning college that has been approved by Harvard Business School to offer the MoC material.

This programme provides an opportunity to study MSc Data Analytics using a flexible and distributed learning environment that will enhance your learning experience as Robert Kennedy College provides a bespoke series of modules via distance learning that, within a set time frame, allow study at a pace, place and location which suits you.

Much of the learning and development on this programme is designed to encourage you to become an independent learner. The combined student experience is one of high level participation and input. The main emphasis on the programme is on a strong practical and professional orientation, and the online work is developed and enhanced through the asynchronous discussion element, where the student experience is drawn together. Preceding this programme you would normally have at least two years' post-graduation work experience, and this programme will build upon your prior knowledge and skills gained within a wider organisational and contextual framework.

After successfully completing the programme you will acquire additional transferrable skills like critically reflect on personal knowledge, practice and skills, continually develop self-appraisal and insight into development plans and outcomes, and deal with complex issues both systematically and creatively and communicate your conclusions effectively to specialist and non-specialist audiences.

The establishment of learning sets is instrumental in driving through the concept of reflective practitioner and is designed to encourage you to interact with other participants, both formally and informally, in seeking best practice and challenging existing practices.

This programme benefits greatly from the internationality derived from recruiting students such as yourself, from all the inhabited continents, and being able to draw on tutors, well qualified in their field, from across the globe.

In this context you will have the opportunity to enhance your team working skills in a multi-cultural environment by conducting discussions and group activities in our OnlineCampus platform.

The programme builds on the strong and long-standing track record in online delivery developed by Robert Kennedy College. This programme is delivered entirely by distance learning. RKC's tailor-made, state-of-the-art software for online course delivery (OnlineCampus) is a highly evolved all-encompassing, interactive and easy-to-use software designed to make studying online an enjoyable experience.

The shared delivery reinforces the strong partnership between the University and the College. With 9 years of experience in delivery online programmes this is an excellent opportunity to give to students the best of both worlds. You enjoy a true University of Cumbria teaching experience combined the Swiss quality education offered by the College and its state of the art online learning platform.

This programme has been designed with a certain degree of flexibility in mind; however, some of the modules need to be taken at certain times (e.g. you need to start with the non-credit Induction and your first module needs to be Information Management). Details are available in a subsequent section of this programme specification - Programme Curriculum Map.

Aims of the Programme

The overall aims of the Programme are:

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1. further develop relevant analysis statistics, machine learning, business and technology knowledge, both academic and professional, in line with postgraduate standards/benchmarks;
2. develop critical reflection skills and engagement with organisational and professional theory to understand and, where appropriate, challenge existing individual and organisational perspectives and practices;
3. develop, and where appropriate apply, new knowledge and applied skills to add value by enhancing organisational capability;
4. develop conceptual knowledge and understanding of how research methodologies enable the critical analysis, interpretation, synthesis and application of evidence within the student's field of study and professional practice;
5. develop commitment to continuous personal and professional development, independence and reflective learning;
6. develop particular expertise and understanding of business and technical strategies for data analytics and the subsequent skills to implement solutions.

Successful students will be able to:

1. engage in effective individual research and demonstrate the ability to understand and apply management theory, and to make, when necessary, sound judgments under conditions of uncertainty;

2. exhibit improved independent research and time management skills, having undertaken a substantial self-managed research project which involved application of a variety of management and research practices, and demonstrate expertise and understanding of issues in data analytics;
3. demonstrate enhanced interpersonal and team skills, through working with others from different industry or cultural backgrounds;
4. continue to reflect on their existing experiences, and learn from and build on the experience of others;
5. develop into modern, well rounded and outward looking managers with a high concern for customers and colleagues, capable of taking responsibility for themselves, their people, their areas of responsibility and their organisation.

Level Descriptors

Level Descriptors describe in general terms the expected outcomes you will achieve at each level of study as you progress through your programmes. They describe the relative demand, complexity, depth of learning and learner autonomy associated with a particular level of learning and achievement. The University's Level Descriptors are aligned to the national [Framework for Higher Education Qualifications](#) (FHEQ) and are a key mechanism for ensuring the academic standards of the University's provision.

At Level 7 (Usually Master's level), you will be able to demonstrate that you have the ability:

- To display a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice.
- Employ advanced subject-specific and cognitive skills to enable decision-making in complex and unpredictable situations.
- Generate new ideas and support the achievement of desired outcomes
- Accept accountability for decision making including the use of supervision
- Analyse complex concepts and professional situations by means of synthesis of personal and workplace reflection and data drawn from scholarship and research in the field.

Programme Outcomes – Knowledge and Understanding

The programme provides opportunities for you to develop and demonstrate the following:

After 60 credits of study (PGCert) you will be able to demonstrate:

K1. An understanding of the role and function of the technical, societal and management dimensions of computer systems, including the key drivers of change;

K2. The ability to evaluate and critically assess systems (which may include software, devices, people, and so on), to recognise the individual components and to understand their interaction, to improve systems, to replace them and to create them;

K3. Understand and be able to produce solid critical analyses of literature sources and produce effective and coherent discussions on advanced aspects of computer systems use.

After 120 credits of study (PGDip) you will be able to demonstrate:

K4. A systematic understanding of the professional, legal, social, cultural and ethical issues related to computing and an awareness of societal and environmental impact within a continuously evolving environment;

K5. An understanding of the core disciplines of information management, databases, machine learning/AI and analysis statistics in a global context, at middle/senior management level;

K6. The application of critical thinking to the successful management of computer systems, be it hardware or software, including a deep understanding of the processes of strategic problem-solving and decision-making, and the ability to communicate the conclusions clearly to specialist and non-specialist audiences.

After 180 credits of study (MSc) you will be able to demonstrate:

K7. The range of research methods that can be applied to the study of advanced aspects of computer systems use

K8. A comprehensive theoretical foundation in the extensive area of computing and data analysis in an international environment given the global context, complemented by a variety of analytical and personal skills

K9. A strong understanding of how your knowledge and skills may be employed efficiently within an organisational setting (with a particular focus on analysis statistics).

Programme Outcomes – Skills and other Attributes (including Employability Skills)

The programme provides opportunities for you to develop and demonstrate the following:

After 60 credits of study (PGCert) you will be able to demonstrate:

S1. self-direction and originality in tackling and solving problems.

After 120 credits of study (PGDip) you will be able to demonstrate an ability to:

S2. make decisions in complex and unpredictable situations

S3. act autonomously in planning and implementing tasks at a professional level.

After 180 credits of study (MSc) you will be able to demonstrate an ability to:

S4. critically reflect on personal knowledge, practice and skills, continually develop self-appraisal and insight into development plans and outcomes, and deal with complex issues both systematically and creatively

S5. communicate your conclusions effectively to specialist and non-specialist audiences.

External and Internal Reference Points

The following Subject Benchmark Statements and other external and internal reference points have been used to inform the Programme Outcomes:

[QAA Subject Benchmark Statement: Computing \(Master's\) \(October 2019\)](#)

[UoC Strategic Plan](#)

[UoC Learning, Teaching and Assessment Strategy](#)

[UoC Academic Regulations and Academic Procedures and Processes](#)

Graduate Prospects

Data is all around and there is almost an urgent necessity to collect and preserve whatever data is being produced, for the concern of missing out on something vital. Ever since the advent of the Internet, a huge amount of data is now floating around – and what it is done with it is what matters currently. Data Analytics has become an essential aid to improving business and decision making, particularly when it helps having the biggest edge over the competition; as such, professionals who are skilled in Data Analytics are highly sought after.

Learning, Teaching and Assessment Strategies employed to enable the Programme Outcomes to be Achieved and Demonstrated

As a student at the University of Cumbria and Robert Kennedy College, you are part of an inclusive learning community that recognises diversity. You will have opportunities to learn by interacting with others in a collegiate, facilitative and dynamic learning environment. Teaching, assessment and student support will allow equal and equitable opportunities for you to optimise your potential and develop autonomy.

We seek to create a stimulating and innovative community of learning, even at a distance. Facilitated by our expert practitioner staff, you will experience a learning environment that is well equipped, flexible, and stimulating.

Learning and Teaching

The teaching and learning methodologies applied will embed the principles of the aims of the programme, in terms of international development, global awareness and individual development for the workplace.

The promotion of inclusive practice across a range of learner types, utilising the appropriate learning technologies and the provision of active learning and social learning underlie the teaching principles applied.

In terms of workplace preparedness, workplace and professional learning necessary for the needs of the workplace entail applying problem solving under the interaction of theory and practice with strong emphasis on practical management and work-related activities.

Finally the learning processes will emphasise the global perspective and internationalisation with strong emphasis on development of entrepreneurial skills. These principles are reinforced through research informed teaching, supported by industry-based knowledge and expertise.

Summative and Formative Assessment

Intellectual and cognitive skills are assessed by means of written assignments, including extended essays and reports. Quantitative skills, including the use of ICT, are assessed via worked problems.

Assessment is focussed on providing opportunities for both formative and summative assessment. For all modules, formative assessment is in an interim assignment and also continuously and on-going via the medium of the online forums whereby tutors comment on ideas expressed, give feedback on the direction of the discussion, and recommend courses of action/lines of thought that might be taken.

Summative assessment is based on analysis and critical evaluation of case-study material to facilitate the real-world application of knowledge and integration of the often considerable expected experience of the students as well as theoretical material.

Student Support

We provide responsive learner support that promotes student success. Our approach to learner support is designed to support achievement and progression, champion inclusivity and accessibility, prepare you for opportunities beyond study, and promote independence and resilience, enabling you to achieve your potential.

As a student of the University of Cumbria and Robert Kennedy College, you will be taught by academics and expert practitioners who facilitate learning through structured inquiry. You will be provided with access to high quality academic resources through physical and digital libraries and will be supported to develop skills that enable you to become a critical, reflective, discerning and independent learner and researcher.

You will study the greater part of your award online with Robert Kennedy College (RKC). Your support will be provided directly by RKC.

Induction

Students receive a comprehensive induction both to RKC's VLE (OnlineCampus) and the various University of Cumbria regulations through the online module "Induction". This non-credit module covers various introductory issues such as: Motivation, Understanding the Programme Handbook, Registering and Withdrawing from a module, Academic Writing, Academic Malpractice, and Grading Policy. The module is composed of these six main units and each unit includes a video and audio tutorial. Students are also introduced to the concept of online asynchronous communications via the OnlineCampus forums. Continuous monitoring of the module by RKC faculty members ensures a prompt resolution of any questions well before the start of the first credit-bearing module. The induction module is ongoing: there is no end-date and students can always refer to it or post questions in the relevant forum at any stage of the programme.

Library and Academic Support (based in Information Services)

In principle all modules will provide all the necessary learning resources (e.g. in PDF format) to complete the course successfully. Some modules might require the purchase of a physical textbook and students will be notified of this requirement well in advance. To conduct their academic research students will have access to the University of Cumbria online library services.

IT and Technical Support

Given the distance learning/online nature of the course students are expected to have a certain familiarity with basic IT systems and internet access. Through the "onlinecampus" app provided by the college students are also able to access course material and download it in their online devices.

For IT matters related to the College students have access to support via email, telephone and chat via the Studentcare assistance.

StudentCare Assistance

RKC operates an online student support system 'StudentCare'. The StudentCare assistance facility features an online Live Support function via instant messaging where students are able to get instant answers to general questions. This is in addition to a dedicated phone line, an online forum and a problem-solving ticketing system, Live Support has several representatives ready to provide assistance. This means that the most common issues students may experience can usually be solved in a few minutes.

Programme Curriculum Map					
Academic Level	Module Code	Module Title	Credits	Module Status*	Programme Outcomes achieved
7	CRKC7004	Information Management	20	compulsory	K1-3, S1-3
7	CRKC7014	Digital Marketing	20	compulsory	K1-4, S1-3
7	CRKC7041	Advanced Databases	20	compulsory	K1-3, K5, S1-3
7	CRKC7042	Data Analytics	20	compulsory	K1-5, S1-3
7	CRKC7043	Artificial Intelligence	20	compulsory	K1-5, S1-3
7	CRKC7044	Internet of Things	20	optional	K1-4, K6, S1-3
7	CRKC7005	Corporate Strategy and Competitiveness	20	optional	K1-4, K6, S1-3
7	CRKC7030	Dissertation	60	compulsory	K7-9, S4, S5
Notes					
CRKC7005 (Corporate Strategy and Competitiveness) is a residential module in Zurich. Students wishing to take this module are responsible for costs associated with travel and accommodation for this and any associated visa requirements.					
* Key to Module Statuses					
Compulsory Modules	Must be taken although it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)				
Optional Modules	Are a set of modules from which you will be required to choose a set number to study. Once chosen, it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)				

Programme Delivery Structure: Part Time/ Full time (by taking modules in parallel)				
Module Code	Module Title	Delivery Pattern	Method(s) of Assessment	Approximate Assessment Deadline
		Autumn Semester / Spring Semester / Extended Spring Semester / Year-Long		
CRKC7004	Information Management	Compulsory entry module (offered every month)	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7014	Digital Marketing	Compulsory module offered three times a year	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7041	Data Analytics	Compulsory module offered three times a year	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7042	Advanced Databases	Compulsory module offered three times a year	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7043	Artificial Intelligence	Compulsory module offered three times a year	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7044	Internet of things	Optional module offered three times a year	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start
CRKC7005	Corporate Strategy and Competitiveness	Optional module offered several times a year (based on demand)	Formative assessment at six weeks, final summative assessment at 12 weeks	Twelve weeks after module start

CRKC7030	Dissertation	Compulsory	Ongoing formative liaison with supervisor, final summative assessment on submission of final paper	Six to twelve months
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Outline Study Plan

Below are two examples of study plans, one for full time and one for part time. Since the programme offers flexibility in terms of the choice of modules, these are indicative.

Full-time Study Plan (1 year example)		
Term 1	Starting module	
Term 2	Modules 2 & 3 in parallel	
Term 3	Modules 4&5 in parallel	Dissertation
Term 4	Module 6	

Part-time Study Plan		
1½ years' example		
Term 1	Starting module	
Term 2	Module 2	
Term 3	Module 3	
Term 4	Module 4	Dissertation
Term 5	Module 5	
Term 6	Module 6	

Exceptions to Academic Regulations

There are no exceptions to the Academic Regulations for MBA Digital Marketing.

Methods for Evaluating and Improving the Quality and Standards of Learning

Mechanisms used for the Review and Evaluation of the Curriculum and Learning, Teaching and Assessment Methods	<ul style="list-style-type: none">• Module Evaluation• Programme Validation and Periodic Review• Annual Monitoring• Regular Peer Review of Teaching, both formal (internal moderation before University moderation) and informal• Constant dialogue between RKC and UoC Link tutors• External Examiner Reports
Mechanisms used for gaining and responding to feedback on the quality of teaching and the learning experience – gained from: Students, graduates, employers, placement and work-based learning providers, other stakeholders, etc.	<ul style="list-style-type: none">• Module Evaluation Forms• Input from post-module student surveys, encompassing quality of teaching, e-learning tools, learning outcome, assessments and feedback• Programme review of modules• Module/Programme/Personal tutorials• Meetings with External Examiners

Date of Programme Specification Production:

November 2019

Date Programme Specification was last updated:

For further information about this programme, refer to the programme page on the University website

The following information has implications for potential international applicants who require a Tier 4 visa to study in the UK

Is the placement requirement more than 50% of the programme?

No

If yes, what % of the programme is the placement requirement?	0%
If yes, is the amount of placement a statutory requirement to meet Professional, Statutory or Regulatory Body (PSRB) or Department of Education requirements?	No

Mapping of Programme to QAA Standards

QAA Standard	Module	Information Management	Digital Marketing	Data Analytics	Advanced Databases	Artificial Intelligence	Internet of things	Corporate Strategy and Competitiveness	Dissertation
Section 7.2: All students graduating with a master's degree in computing are expected to have demonstrated:									
a systematic understanding of the knowledge of the domain of their course of study, with depth being achieved in particular areas, including both foundations and issues at the forefront of the discipline and/or professional practice in the discipline; this should include an understanding of the role of these in contributing to the effective design, implementation and usability of relevant computer-based systems									
a comprehensive understanding, and a critical awareness of the essential principles and practices of the domain of the course of study as well as current research and/or advanced									

<p>scholarship; current standards, processes, principles of quality and the most appropriate software technologies to support the specialism; the relevance of these to the discipline and/or professional practice in the discipline; and an ability to apply these</p>									
<p>consistently produced work which applies to and is informed by research and/or practice at the forefront of the developments in the domain of the course of study; this should demonstrate critical evaluation of aspects of the domain, including appropriate software support, issues of security and data integrity, the ability to recognise opportunities for software or hardware tools as well as possible tool improvement, an understanding of the importance of usability and effectiveness in computer systems development, and generally the acquisition of well-developed concepts</p>									
<p>understanding of the professional, legal, social and ethical framework within which they would have to operate as professionals in their area of study; this includes being familiar with and being able to explain significant applications associated with their course of study and being able to undertake continuing professional development as a self-directed lifelong learner across the elements of the discipline</p>									
<p>the ability to apply the principles and practices of the particular course's domain in tackling a significant domain-related activity; the solution should demonstrate a sound justification for the</p>									

approach adopted as well as originality (including exploration and investigation) and a self-critical evaluation of effectiveness, but also critical awareness of current problems and new insights, and a sense of vision about the direction of developments in aspects of the domain of the course								
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