

Developing Online Degree Apprenticeship Programmes:

The Critical Ingredients

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Apprenticeships at Strathclyde



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2017

First Graduate
Apprenticeship
Programmes launch

6 Graduate Apprenticeship
Programmes

909 Graduate
Apprentices
since 2017

BEng (Hons) Engineering:
Design & Manufacture

BA (Hons) Business Management

MSc Cyber Security

BSc (Hons)
IT: Software Development

BSc (Hons)
IT: Management for Business

BEng (Hons) Civil &
Environmental Engineering

A project approach to module development



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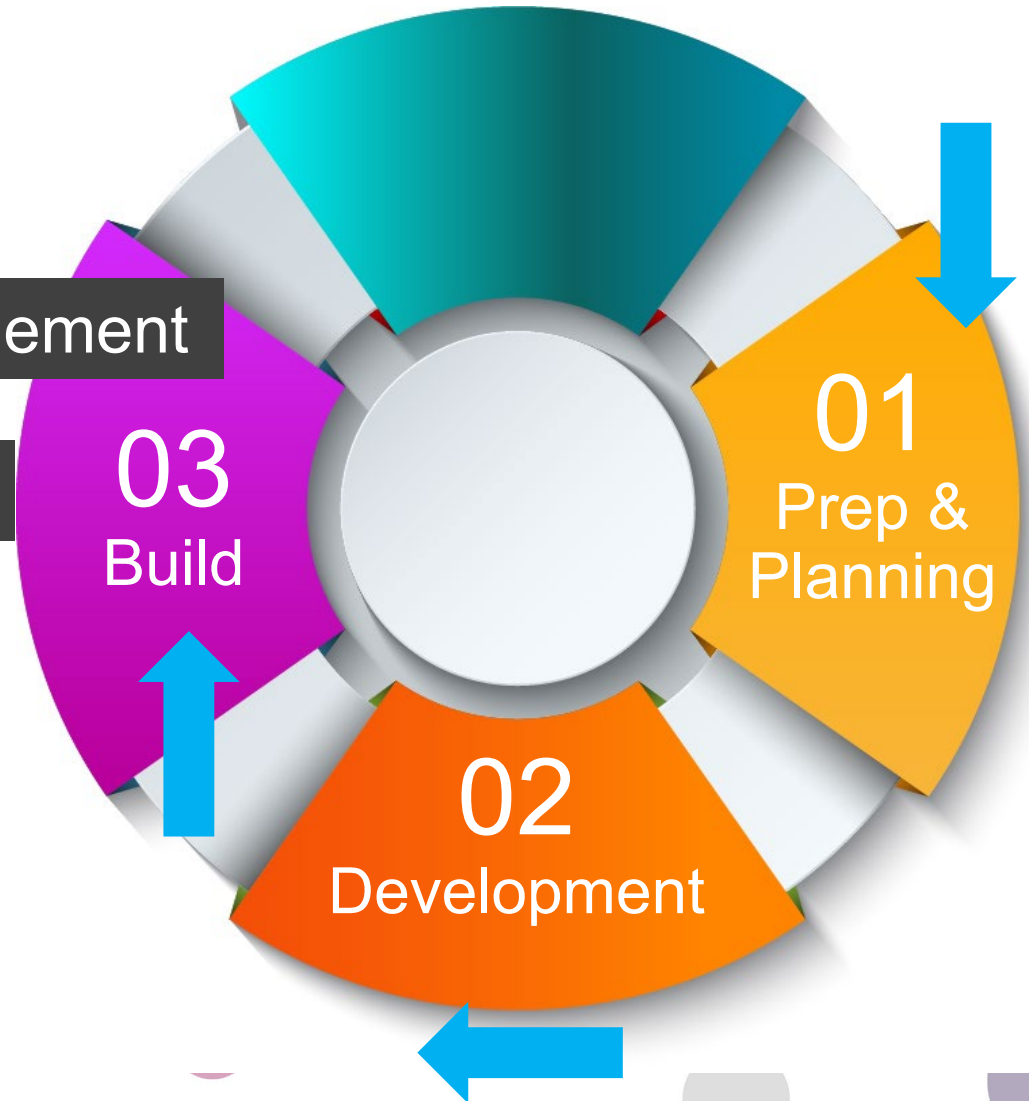
Partnership

Prince2 Project Management

3-Stage Design Model

Quality Standards

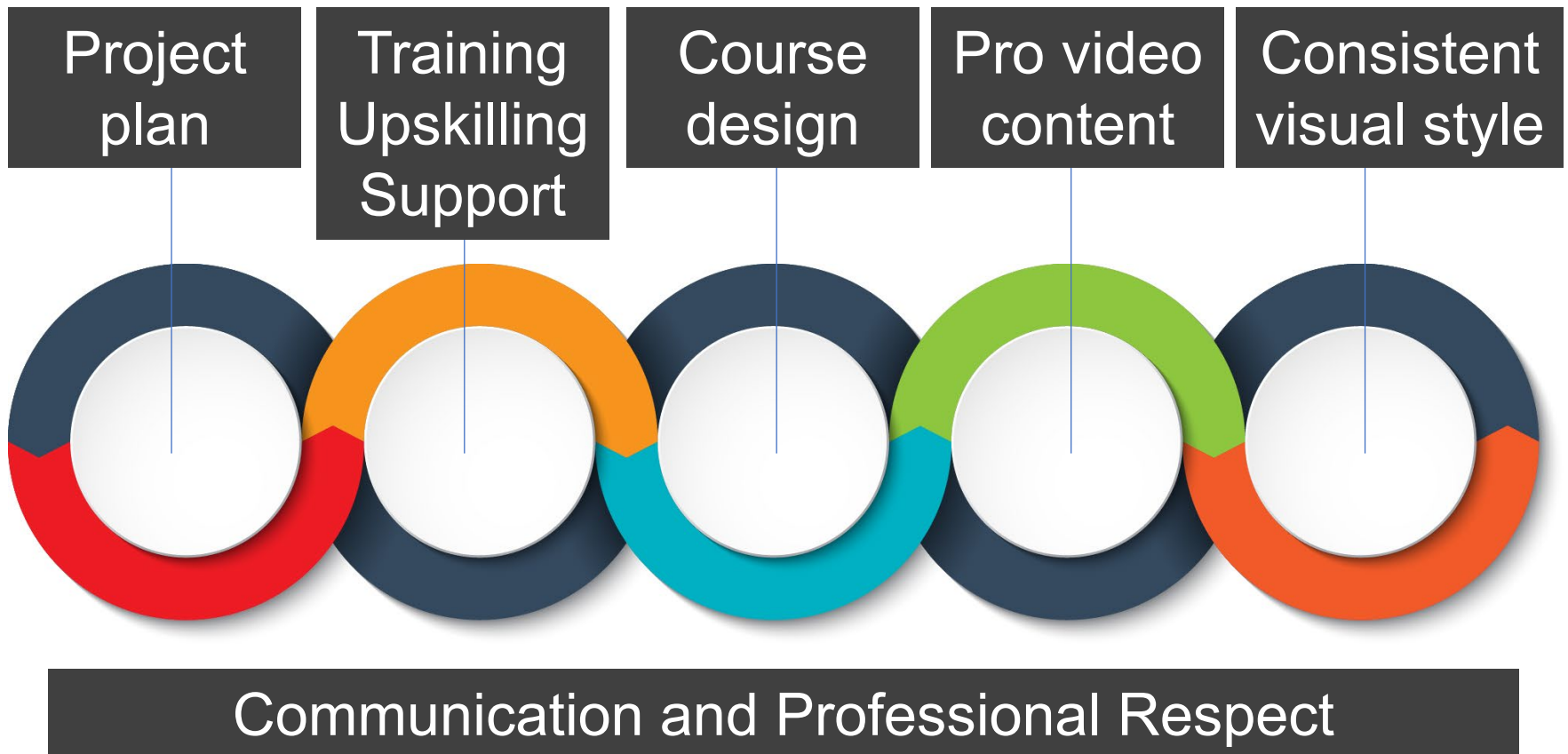
Governance





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The key ingredients





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The video process

Define video content – media schedule

Film, edit, approve video

Check transcript / captions

Team collaboration / co-ordination

The tool embedded the process – "SEACOW"



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The video process - production management

Seacow
Scheduling, Editing and Captioning - online workflow

Logged in as Anne Hanlon-Bucher. [Log out »](#)

Menu **My Projects** **Project EO203**

EO203 - Mechanical Engineering Principles

Video worklist - 106 videos total

Week 1

- EO203 Welcome to the module
- EO203 Welcome to week 1
- W01-01 Introduction
- W01-02 Density and pressure **TODO** **EDITS**
- W01-03 Density and pressure - Worked example
- W01-04 Viscosity
- W01-05 Viscosity - Worked example

EO203 Welcome to the module

VIDEO PRODUCTION

Presenter: William Nicholls [Delete](#) [Rename](#) [History](#) [720 FHD](#) [Shoot scheduled](#) [Shoot complete](#)

Video Production: Craig Bishop [RECORD](#) [Share file](#) [WRITE updates ON](#)

RESOURCE SPACE AND REVIEW

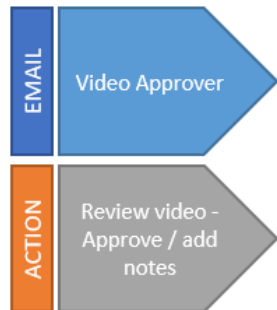
Video Approver: William Nicholls [First edit complete](#) [Video approved](#)

ResourceSpace ID: 659 [Search](#) [Unlink](#) [Delete edit](#)

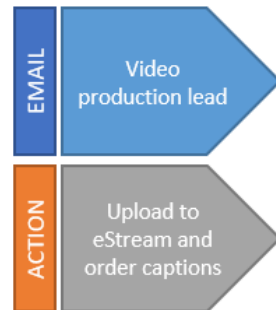


The video process - team co-ordination

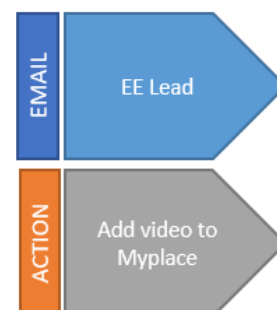
When a new edit is
available for review



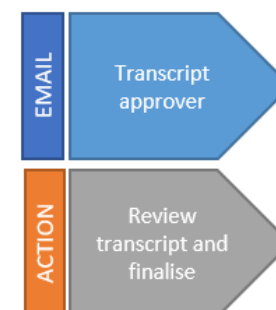
When someone
APPROVES A VIDEO



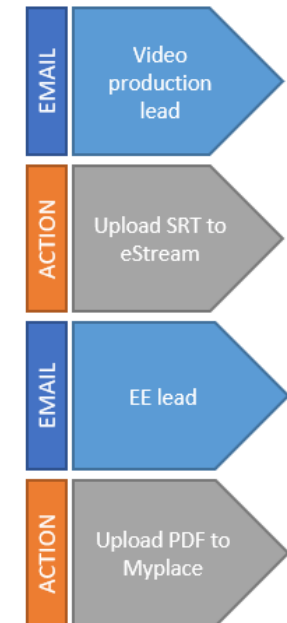
When eStream ID is
linked to SEACOW



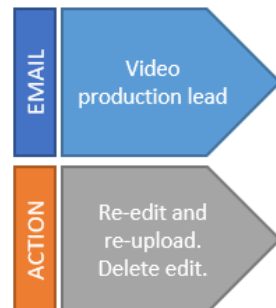
When the CAPTIONS
are ready for review



When the captions
are FINALISED



When someone adds
EDIT NOTES



The video process - output



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Find z_x and z_y if $z + e^z - xy^2 = 0$

Equation defines $z(x, y)$ implicitly. Differentiate w.r.t. x :

$z_x + z_x e^z - xy^2 = 0$

or I'm using implicit differentiation in order

```

1 1
2 00:00:00,000 --> 00:00:03,370
3
4
5
6
7 00:00:03,370 --> 00:00:05,910
8 OK, in this lecture we're going to
9 look at a concept called
10
11
12 00:00:05,910 --> 00:00:08,430
13 instantaneous velocity.
14
15
16
17 00:00:08,430 --> 00:00:10,400
18 Just to put it in context,
19 in the last lecture
20
21
22 00:00:10,400 --> 00:00:13,200
23 we looked at the concept
24 of average speed
25
26
27 00:00:13,200 --> 00:00:15,430
28 average
29 velocity.
30
31
32 00:00:15,430 --> 00:00:18,135
33 So moving on to something
34 that is slightly different,
35
36
37 00:00:18,135 --> 00:00:20,790
38 the ancient Greeks with
39 all their intellectual
40
41
42 00:00:20,790 --> 00:00:23,790
  
```

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Graduate Level Apprenticeship - Design and Manufacture Programme

Class: E0103 Mechanical Engineering Principles

Transcript: 01-04 One dimensional kinematics

In this lecture, we're going to look at 1D kinematics. So this is a relationship between velocity, displacement, and acceleration without thinking about what the causes of motion are.

So this is from chapter 2.5 in the textbook. That's motion in a straight line at a constant acceleration. So if the acceleration is constant and doesn't vary with time, then over a time period, t , velocity changes from u to v and the position changes through the displacement, s , then these quantities can be weighted by the following equations: v equals u plus at , s equals ut plus $1/2 at^2$, v squared equals u squared plus $2as$.

These are called the kinematic equations for motion in a straight line. And if you've done A level or higher physics, you should have come across these equations before. But they are in the text, because you can see.

OK. So how are these equations derived? We'll come to this. But the person who actually first derived these equations was Galileo Galilei and his Law of Falling Bodies, which states that all objects fall at the same acceleration in a vacuum. So Galileo's Law of Falling Bodies: how did he actually do this?

Well, he used experiments. He used inclined plane experiments and little bells to show that s equals $1/2 gt^2$ squared. Using proportions between magnitudes and some obscure mathematical techniques involving geometrical figures. He was able to show that v is equal to gt . And he also was able to show that the motion had a constant acceleration, g .

In fact, Galileo had to actually think up this concept of acceleration. He had a hunch that the acceleration would be constant, but he had to actually think up the concept of change of velocity divided by change in time, which was quite difficult for him, because objects: it was quite difficult to investigate the actual motion of objects at that time. They didn't have fast cameras, and video cameras, and the like to investigate motion. So it was quite a significant leap in scientific knowledge when he came up with this concept of acceleration and derived these equations.

Now, we could actually do a similar thing. We could use experiments and differential calculus to do the same thing. By using experiments we can show that s equals $1/2 gt^2$ squared. But using some more modern equipment we could show that s is equal to $1/2 gt^2$ squared.

We know that v is equal to ds by dt . So we know that velocity is the rate of change of position, or displacement divided by time: $v = ds/dt$.

Now we know that s is equal to $1/2 gt^2$ squared. So we can substitute that in there. So if we take derivative with The product of useful knowledge

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REF UK TOP 20 RESEARCH-INTENSIVE UNIVERSITY
THE UK UNIVERSITY OF THE YEAR WINNER
THE UK ENTREPRENEURIAL UNIVERSITY OF THE YEAR WINNER

4	2	0	0	11	1	65
TO EDIT	TO APPROVE	TO ORDER	WITH 3PLAY	IN REVIEW	TO PUBLISH	COMPLETE
4%	2%	0%	0%	13%	1%	78%
70	68	5	4	0	2078	
RECORDED	APPROVED	DAYS TO GO	REVIEWERS	VLE USERS	SRT CHANGES	
84% (21%)	81% (20%)					



The video process - output

EO202 W01 Introduction to Intellectual Property

View all results

Strathclyde

Intellectual Property Rights

- intangible assets
- often overlooked, misunderstood and very often undervalued
- intellectual property is little different from any other property - it can be sold, leased or rented
- does not refer exclusively to "high-tech"

Resource downloads

Original MP4 File 87.2 MB [Download](#)

Resource details

RESOURCE ID 161	ACCESS Open	CONTRIBUTED BY Craig Bishop	DATE 03 October 18	PROGRAMME NAME Graduate Apprenticeship - Engineering Design and Manufacture	ESTREAM ID 14884
VIDEO APPROVER Ross Maclachlan	MYPLACE LEAD Anne Hanlon-Bucher	MODULE CODE EO202	MODULE NAME Design and Production	VIDEO SIZE 1280x720	LEAD PRESENTER Ross Maclachlan
					VIDEO PRODUCTION LEAD Craig Bishop

Add keywords:

[Add keywords](#) [Refresh from Transcript](#) [Copy to clipboard](#) [Keywords CSV](#)

- intellectual property [250] x IP as an asset [250] x main intellectual property right types [234] x patents [230] x
- intangible assets and intellectual property [217] x nec's reputation and business [213] x many other aspects [211] x
- main intellectual property types [210] x last few years [197] x nec [184] x product development industry [182] x
- intangible assets [182] x intellectual property type [180] x other type of property [177] x digital software products [177] x
- other companies' names [174] x digital camera [165] x product [159] x example [158] x ip cases [157] x
- trademarks [157] x samsung [155] x malaysian [153] x product example [152] x phone [150] x
- intellectual property rights [150] x case [148] x same patents [148] x secrets [147] x next one [147] x



The video process - output

Updating: Seacow video?

General

Seacow Video ID



Don't know the Video ID? Browse Videos.

Browse Videos

× CL418 - Structural Engineering 2

Search project ▼

Please select a video

Search video ▼

Module reference number



Description

Welcome to CL418

CL418 Project Briefing

Aims and Objectives of Design - Engineering Design

Aims and Objectives of Design - Design thread and

Aims and Objectives of Design - Creativity

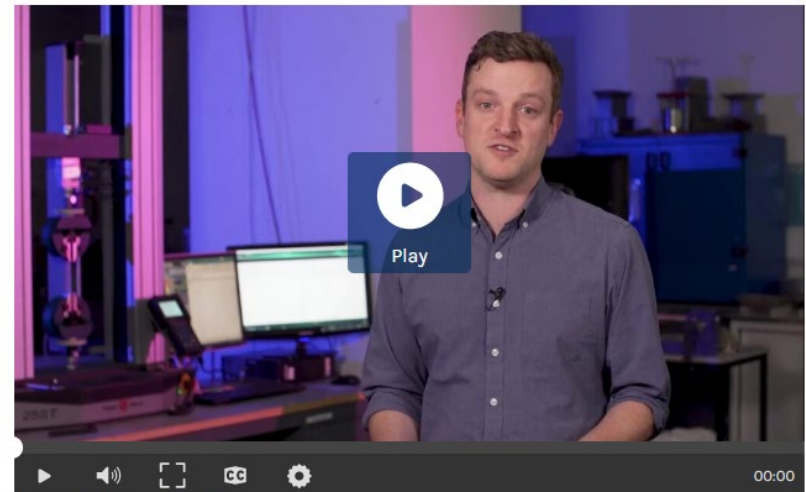
Value for Money

Requirements Statement

Structural Design Process

Structural Design Concepts

Welcome to the Week (00:29)



Presenter: Dr Stewart Beattie

• PDF Transcript

→ Another refer to another

Jump to...

Completing the development



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Course design = site map

Class consistent look
and feel on VLE

Handover to
teaching staff

Quality assurance

Transition to BAU

A screenshot of a VLE interface for the course EO206: Soils and Water 2. The interface features a header with a landscape image and the course title. Below the header, there is a section for Term 3, a navigation bar with a 'Jump to Week' dropdown, and a welcome message for the course. The main content area includes a welcome message for Soils and Water 2, a video player with a timestamp of (00:38), a forum section, and a folder icon for 'Week 1 Video Transcripts'.

nticeships at Strathclyde **Civil and Environmental Engineering**
EO206: Soils and Water 2

Term 3

Jump to Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Welcome to EO206 Soils and Water 2

Welcome to Soils and Water 2. This module introduces fundamentals across soils and ground engineering, hydrology and hydraulics.

(00:38)

Forum

to post any queries or questions you have about the material this week.

VIEW

Week 1 Video Transcripts



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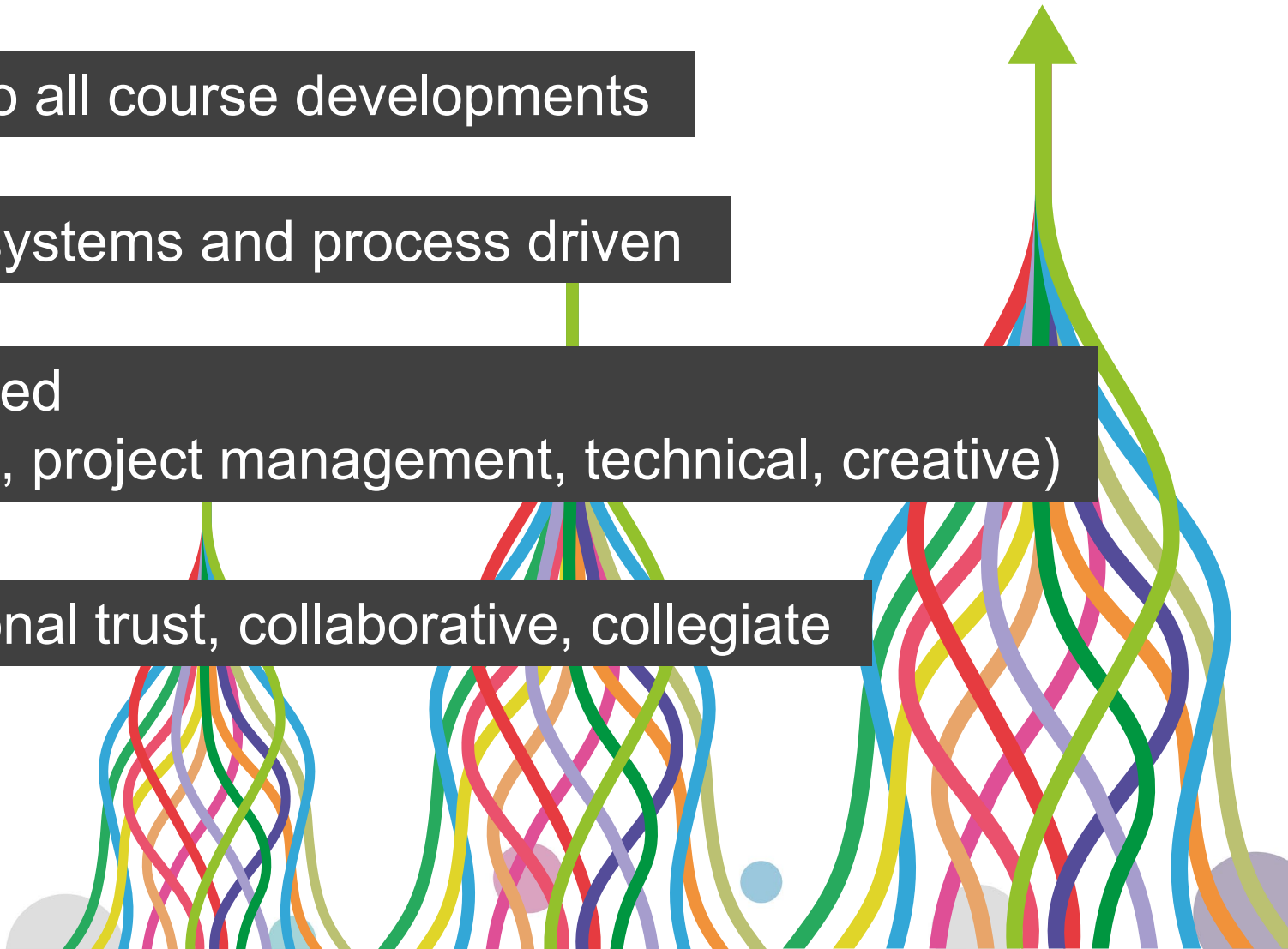
A scalable model

Applied to all course developments

Project, systems and process driven

Multi-skilled
(teaching, project management, technical, creative)

Professional trust, collaborative, collegiate



Thank you



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Online Learning Manager
Education Enhancement

Craig Bishop

Digital Learning Manager
Faculty of Engineering

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Times Higher Education Widening Participation Initiative of the Year 2019
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