



Royal Academy  
of Engineering

# Brand Guidelines

Version 1.0

Messaging

Identity

Photography

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The Royal Academy of Engineering harnesses the power of engineering to build a sustainable society and an inclusive economy that works for everyone.

In collaboration with our Fellows and partners, we're growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public. Together we're working to solve the greatest challenges of our age.

## Messaging

### Proposition

### Tone of voice

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### Strapline

## Brand promise

The Royal Academy of Engineering believes that engineers can transform society for the better – by tackling the greatest challenges of our age and helping to make the world a safer, fairer and more sustainable place to live.

And that level of confidence and ambition sits at the very heart of our brand. Our name must be synonymous with ideas, innovation and impact. While our work is unashamedly ambitious – we've got the people, the profile and the resources to achieve our aims.

When we're telling people about our work, it's vital that we're concrete about our objectives, so that the world can hold us to account. Always remember to tell people what we're doing, why that's important, and how we're going to achieve our objectives.

Our tone of voice is defined by accessibility. And it's important that we recognise the difference between technical or academic writing, and the copy and tone we use in marketing communications. We have no desire to dilute our brand – which is rightly seen as definitive and authoritative.

Just as in life, it's important that we deploy the right conversational tools at the right time: simple and concise for top level introductions. Authoritative and detailed once we've established a relationship with the reader.

We're growing talent.

We're developing skills for the future.

We're driving innovation.

We're building global partnerships.

We're influencing policy.

We're engaging the public.

**Intriguing, determined, charismatic,  
intellectual, collaborative, prestigious,  
brave, relevant, exciting, memorable,  
influential, focused, optimistic,  
inspirational, forward-thinking,  
bold, passionate, and energetic.**

Our brand attributes are: **expert**, **ambitious** and **creative**.  
**Expert** because our Fellows are the best engineers in the UK. **Ambitious** because we believe that engineering holds the key to solving some of the world's greatest challenges – from climate change to social inequality. And **creative** because we have the people, the skills and the ideas to make change happen.

Messaging

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Strapline

**Determined  
optimistic  
confident**

Striving for  
excellence.

Creating  
graduates  
with the skills  
local industry  
needs.

**Conversational  
understanding  
encouraging**

Are you  
curious?

Your  
background  
should never  
be a barrier.

**Bold  
memorable  
energetic**

We're driving  
innovation.

Inspiring  
the next  
generation  
of engineers.

Solving the  
greatest  
problems  
of our age.

# "Engineering for a sustainable society and inclusive economy"

Our strapline captures the essence of our mission and can be introduced to our design collateral where appropriate. It forms a common footer on our internal documents and stationery and use on campaign materials and published research is encouraged.

Messaging

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## Identity

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### Our identity

Our identity helps the Royal Academy of Engineering to stand out from similar organisations. We've created a flexible, versatile, bold and brave visual identity, presenting a sense of renewed clarity, confidence and a passion for innovation.

These guidelines exist to protect our identity – to make it consistent and engaging. They do not exist to stifle creativity, or imprison our brand, but with freedom comes responsibility.

Please try to follow these guidelines accurately so that we can maintain and present a cohesive, united identity that is accessible to everyone.



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## Our logo

Our new logo/marque features a clear, elegant and modern typeface, and a new sharp and precise icon based around our historic flint icon. Some may spot a flint, others might simply see a bold and exciting geometric shape that suggests engineering systems and processes. Others will spot that our logo is three-dimensional rather than 'flat'. There are no right or wrong answers when it comes to decoding our marque. What's important is that it's distinctive and intriguing – instantly recognisable on and offline and interesting enough to incline people to ask questions and engage with our brand.

## Colour

We feel the logo works best when we apply one of the monochrome options opposite. These versions can be used across all online and offline marketing material without any restriction other than the rules outlined in the rest of this section.

Our logo should only ever be placed on top of a plain, gradient or duotone background. The logo should never be placed on standard photographic backgrounds, or on one of our patterns.

Where possible on duotone photography, the logo should aim to sit on an uninterrupted area of negative space.



# Royal Academy of Engineering



# Royal Academy of Engineering

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## Colour

Along with our core monochrome versions, we have four colour versions of the logo that can be used sparingly in instances where photography may not be desirable or suitable.

To ensure maximum impact and legibility of our logo marque, one of the colour options illustrated opposite should only be used on a white or black background, and never with our duotone photography.

**Please note: for accesibility purposes our green variant of the logo and word marque should only be used on a white background.**

Suitable applications could be a full bleed black or white background, for example a business card or other piece of internal stationery, or a simple brochure cover or typographic poster, where pattern or shape is employed over photography.

While designer discretion is encouraged, we recommend that supporting titles, shapes and patterns used with the colour variants should adhere to a complementary colour from the palette, for example blues and greens with a blue logo, oranges and yellows with an orange logo.



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## Protecting our logo

### Clear space

There is a minimum isolation area around the logo that should always remain clear of other text or graphics.

This is measured by the height a portion of the graphical icon, as illustrated opposite.

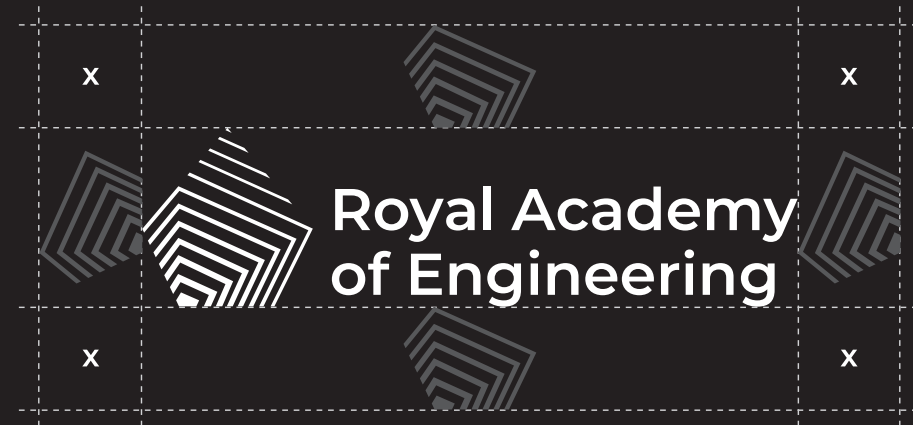
The graphical icon in its entirety should not be used as a rule for the isolation area as it creates a large and impractical area of clear space.

### Minimum size

The minimum sizes for the logo are set at 7mm by 25mm for print applications and 40px by 100px for digital applications.

To ensure legibility, especially with printed materials, our logo should never appear at sizes smaller than this.

Designers of digital materials should ensure that the logo is big and clear enough in all previews and contexts.



Clear space



Minimum size for print



Minimum size for digital

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## Positioning our logo

### Logo position

On all pieces of collateral our logo should be positioned in the top-left corner, next to the margin.

### Recommended margin sizes

A0 = 50mm

A1 = 35mm

A2 = 25mm

A3 = 18mm

A4 = 13mm

A5 = 9mm

### Logo size

The size of the logo will differ depending on the size and purpose of the collateral but here are some recommended logo sizes for standard print formats.

### Recommended logo width size

A0 = 228mm

A1 = 161mm

A2 = 115mm

A3 = 82mm

A4 = 58mm

A5 = 41mm



Royal Academy  
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**Our logo should  
be positioned in  
the top-left corner  
of the collateral**

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## What not to do

It's easy to make mistakes with a logo, so here are a few pointers to make sure our logo always looks as good as we intended it to across everything we do.

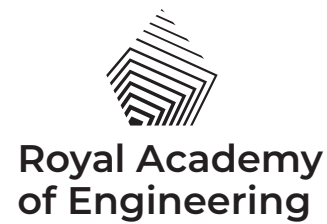
These rules apply to all the colour variations of our logo.



Do not add a gradient to the namestyle



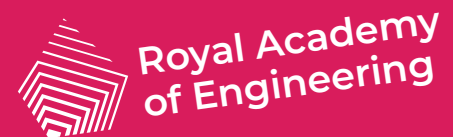
Do not add new colours



Do not change the lock up



Do not add a drop shadow



Do not use on an angle



Do not squeeze or stretch

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## Icon

Our icon is a shortcut for our logo. We only use it only where there is not enough space to use the full logo. Examples where we might use the icon would be for the website favicon, app icon or social media thumbnails.

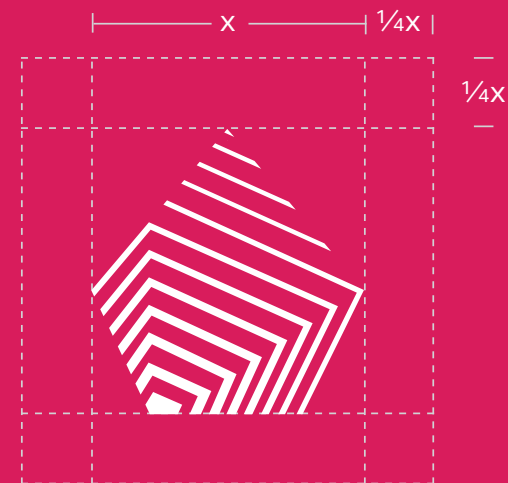
### Colour

Where possible it should always appear white on a black background.

### Clear space

There is a minimum isolation area around the icon that should always remain clear of other text or graphics.

This is measured by  $\frac{1}{4}$  of the width of the icon.



Clear space

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## Sub brands

Our sub brands are defined by a word marque in the same font and size as our Royal Academy word marque, separated from the core logo by a dividing line of the same colour.

Our sub brands have been specifically constructed to be fit for purpose, therefore should they be needed the correct version should be used from the brand package supplied with these guidelines.



Royal Academy  
of Engineering

Africa Prize for  
Engineering Innovation



Royal Academy  
of Engineering

Leaders in Innovation  
Fellowships



Royal Academy  
of Engineering

Ingenious



Royal Academy  
of Engineering

Education  
Resources Hub



Royal Academy  
of Engineering

Enterprise  
Hub



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## Partner brands

When using our logo alongside partner logos on a single sheet such as a poster certain rules must be followed to ensure visual consistency and a hierarchy within our brand collateral.

When we are working in equal partnership, the partner logo(s) may be placed at the top margin, with our logo always at the left margin. To ensure our logo always stays at a legible size, partner logos in this instance may be moved to the bottom margin when working with three or more partners. Please see the examples opposite.

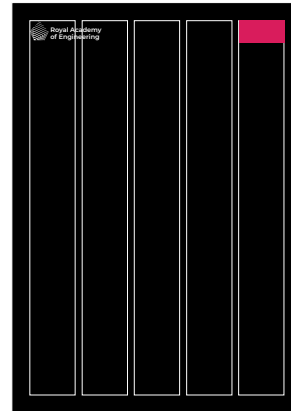
The exception to this rule is National Engineering Policy Centre (NEPC) branded materials. The NEPC logo should be top left and the Academy logo top right.

When working in instances where we are the lead organisation and partner brands are secondary, our logo maintains its top left position however it is desirable for all partner logos to run equally across the bottom margin.

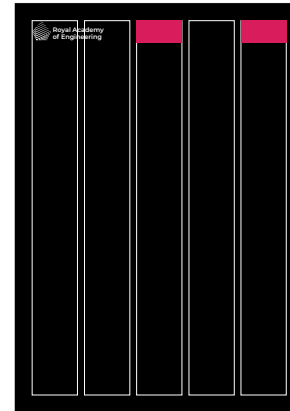
If there are two partners, their logos sit in opposite corners. If there are more than two partners, the logos are spread equally between the corners as illustrated opposite.

## Equal partners

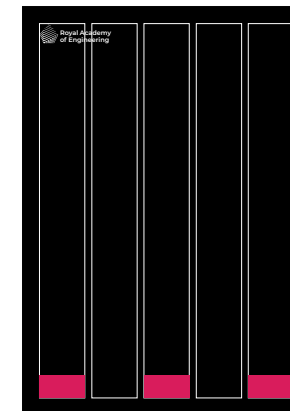
Single partner logo



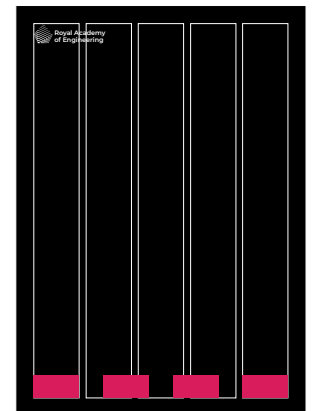
Two partner logos



Three partner logos

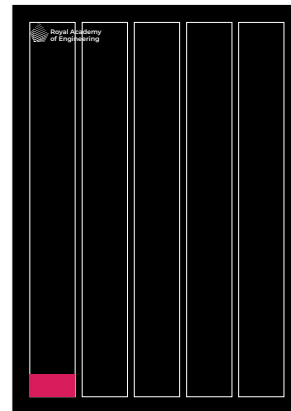


Four partner logos

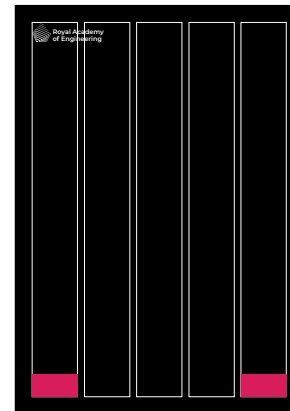


## Secondary partners

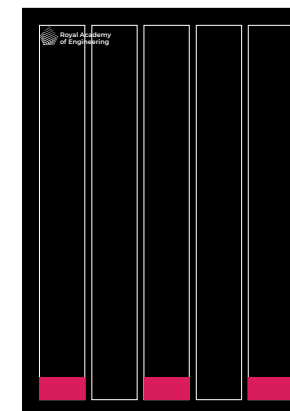
Single partner logo



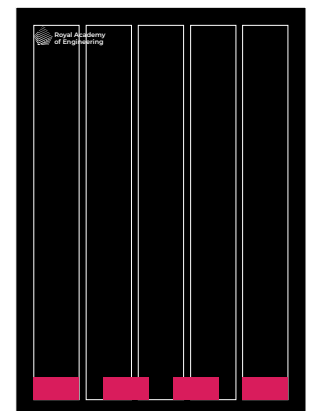
Two partner logos



Three partner logos



Four partner logos



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## Our gradients

Our gradients are a core aspect of our brand image and our preferred method of bringing colour and interest to our comms alongside photography.

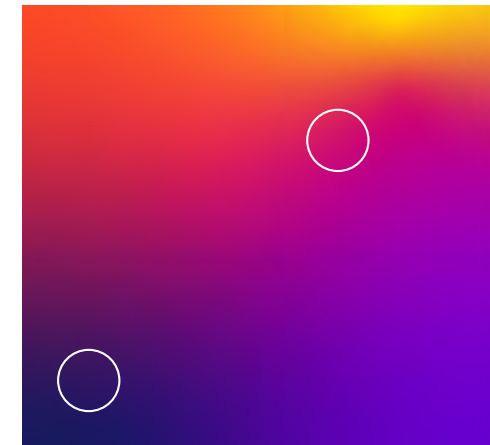
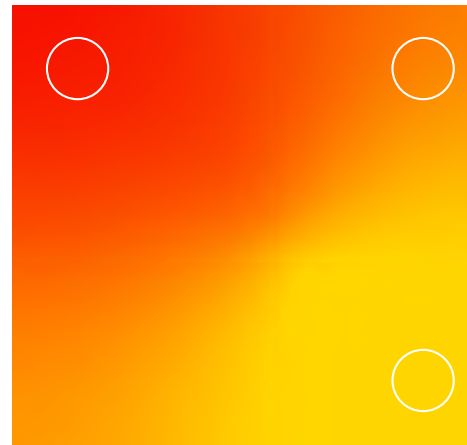
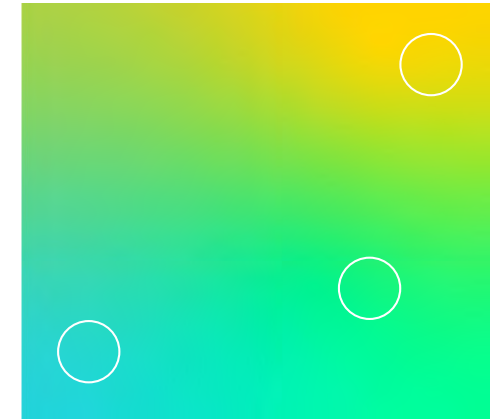
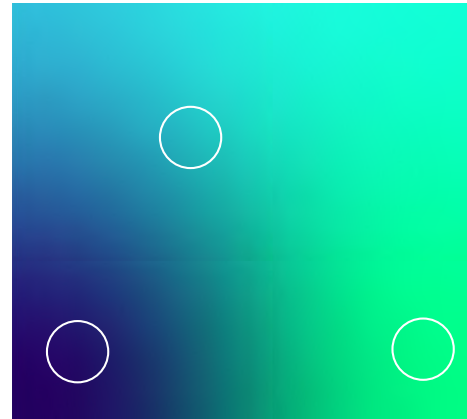
Primarily gradients can be used within shapes, (shown further along in these guidelines) to add dynamic and eye-catching backgrounds to typographic titles and statements. They can also be used as full bleed backgrounds to typographic messages.

Our gradients should only be used as backgrounds or in shapes. They should not be applied to typographic titles or statements.

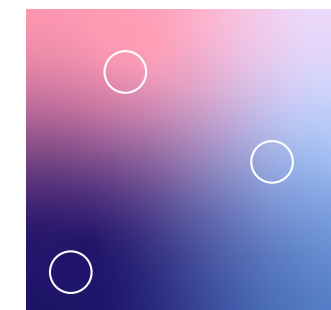
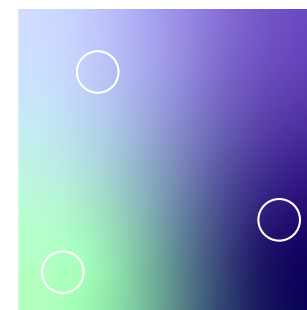
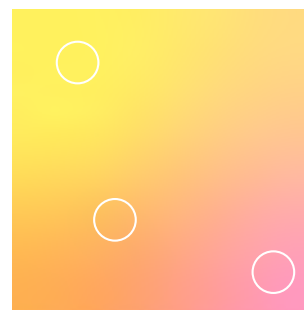
For maximum impact with audience facing material we prefer to use the bolder 'primary' gradient as shown opposite, where black and white typography creates most impact. Our 'secondary' gradients should be used more sparingly and ideally internally within documents.

Our gradients have been carefully created for colour balance and visual consistency, therefore gradients should only be used from the brand asset pack provided with these guidelines.

## Primary gradients



## Secondary gradients



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## Our palette

Our core colour palette is constructed from key values within our gradient backgrounds.

These can be used in typographic headlines or statements but should be avoided in body copy in all instances.

As with our gradients, we have a primary set of colours that we feel work strongest on either white or black backgrounds for maximum impact and legibility.

There is no restriction on using colours from the secondary palette, however designer discretion is advised to ensure these colours are used sparingly and with sensitivity to the spread or editorial in question.

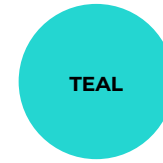
No more than two of the complementary colours shown opposite should be used in any one spread or poster outcome.

When using two colours please ensure significant contrast for maximum impact, for example Sunburst/Fuschia and Yellow/Pastel Yellow would not be suitable pairings.



INDIGO

CMYK 100 \ 100 \ 24 \ 19  
RGB 33 \ 23 \ 107  
Pantone 2755 C  
HEX #21176b



TEAL

CMYK 63 \ 0 \ 26 \ 0  
RGB 36 \ 214 \ 209  
Pantone 3252 C  
HEX #24d6d1



GREEN

CMYK 72 \ 0 \ 73 \ 0  
RGB 61 \ 184 \ 118  
Pantone 347 C  
HEX #3db876



YELLOW

CMYK 1 \ 13 \ 100 \ 0  
RGB 255 \ 214 \ 0  
Pantone 115 C  
HEX #ffd600



SUNBURST

CMYK 0 \ 92 \ 100 \ 0  
RGB 247 \ 54 \ 0  
Pantone 172 C  
HEX #f73600



FUSCHIA

CMYK 10 \ 100 \ 49 \ 1  
RGB 217 \ 28 \ 92  
Pantone 7635 C  
HEX #d91c5c



PASTEL YELLOW

CMYK 3 \ 0 \ 74 \ 0  
RGB 255 \ 242 \ 94  
Pantone 3935 C  
HEX #fff25e



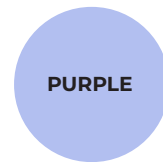
PASTEL BLUE

CMYK 43 \ 0 \ 17 \ 0  
RGB 125 \ 229 \ 227  
Pantone 7471 C  
HEX #7de5e3



PASTEL GREEN

CMYK 35 \ 0 \ 26 \ 0  
RGB 166 \ 255 \ 189  
Pantone 352 C  
HEX #a6ffbd



PURPLE

CMYK 28 \ 20 \ 0 \ 0  
RGB 178 \ 191 \ 240  
Pantone 270 C  
HEX #b2bff0



ORANGE

CMYK 0 \ 67 \ 100 \ 0  
RGB 255 \ 117 \ 0  
Pantone 1585 C  
HEX #ff7500



PINK

CMYK 0 \ 48 \ 7 \ 0  
RGB 255 \ 158 \ 184  
Pantone 183 C  
HEX #ff9eb8

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## Gradients and typography

For maximum impact, only black or white typography should be used on gradient backgrounds.

Black typography should be used on lighter gradients and white typography on darker gradients, as illustrated opposite.

**Black typography  
should be used on  
lighter gradients**

**White typography  
should be used on  
darker gradients**

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## Brand font

Our bespoke Title Font is Montserrat Engineered – a modified version of the Montserrat typeface. We have designed it specifically for headlines on top level audience facing communications, for example a brochure cover, campaign poster or website headline.

It should be used sparingly, and as such it should never be used in body copy in documents or brochures.

Leading for headings should always be set to +8%, so leading on 75pt type would be 81pt ( $75 \times 1.08 = 81$ ). Tracking should always be set to 0pt.

To ensure maximum impact and legibility we would suggest that five lines of copy (as illustrated opposite) is the maximum. Montserrat Engineered is most successful when used for titles and short statements, therefore lengthy paragraph copy should be avoided.

Examples of how our bespoke font is best utilised can be seen in the 'Applications' section of these guidelines.

Our bespoke  
headline  
typeface is  
Montserrat  
Engineered.

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## Brand font

Montserrat Bold is used for internal titles, sub headings, pull-out statements and quotes throughout all communications. It is always used in sentence case.

Leading for headings should always be set to +8%, so leading on 75pt type would be 81pt ( $75 \times 1.08 = 81$ ). Tracking should always be set to 0pt.

Montserrat Regular is our body copy font and should be used for all flowing body text.

Montserrat Medium can be used with body copy to highlight key points, or in instances where Bold may be too heavy at a small size – for example table titles or statistics.

**Please note that body copy should never be smaller than 9pt in size for accessibility purposes.**

Leading for body copy should be set at +30%, so leading on 12pt type would be 16pt ( $12 \times 1.3 = 15.6$ ) rounded to the nearest decimal. Tracking should always be set to 0pt.

**We use Montserrat Bold for secondary headlines, quotes, and key statements.**

We use Montserrat Medium for highlighted body copy.

We use Montserrat Regular for flowing body copy.

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## Fallback typeface

In circumstances when our brand fonts are not available, Arial can be used as a replacement.

This includes occasions when you're sending Microsoft Office publications that will need to be edited by someone who does not have the Montserrat typeface on their computer. And where embedding the font hasn't worked (as can happen).

It may also be necessary to use a 'web safe' font like Arial for emails and email newsletters because of the limitations of older email browsers.

Please note, the fallback font should never be used to create offline collateral.

# Arial is our fallback typeface

ARIAL BLACK

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

0123456789#\*!@()

ARIAL REGULAR

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

0123456789#\*!@()

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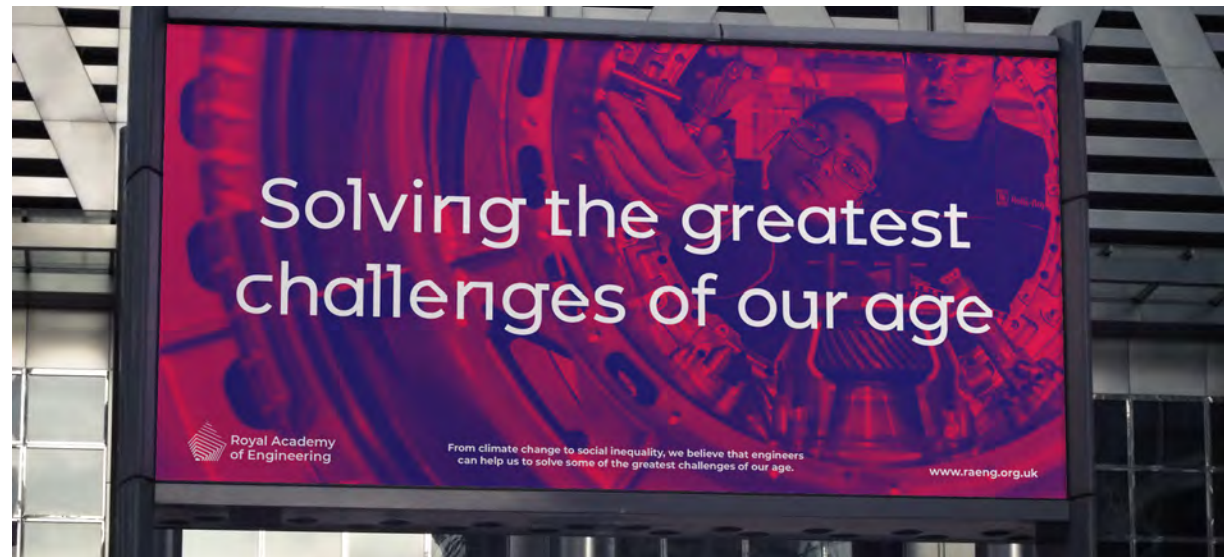
### Shape

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## Type alignment – Covers/Advertisements

In most cases on covers or hero campaign material we endeavour to centralise our headings.

Centralised text is generally used for document headings, campaign titles and key statements or quotes when these are used in isolation on a page or banner.





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## Type alignment – Editorial

When pulling out key statements or quotes internally within a document, we can left-align or centralise text as with our titles.

Left aligned text is used with paragraph copy to highlight key statements or quotes that do not warrant a full page spread, as shown opposite.

Centralising text is particularly effective within one of our graphic shapes and on a core colour, full bleed background as illustrated opposite.

With flowing paragraph body copy we try to ensure that the type is left-aligned where possible. The exception to this rule is type within forms, shapes and tables, where centralised text may be used for visual consistency and a more balanced format.

**The Academy is investing  
£180m in the profession,  
supporting the growth  
of over 500 companies,  
developing the workforce,  
influencing policy and  
inspiring a million young  
people to explore a career  
in engineering.**

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## Stimulating R&D for a faster and better recovery

**A knowledge and innovation-led economy remains the best strategy for future prosperity. Engineering has huge potential to contribute to a resilient UK economy that works for all, with innovation improving productivity, investment opportunities, public health, safety and security across the UK and beyond.**

Here, the Royal Academy of Engineering sets out near-term interventions to ensure R&D in businesses of all sizes in the UK stays on track to deliver the government's ambitions and support a better and faster recovery from the COVID-19 crisis. Following a rapid intelligence gathering exercise, these interventions are targeted towards supporting those parts of the business R&D process most at risk: business-university partnerships, pre-commercial development activities and technology diffusion. The interventions need to be delivered by a variety of organisations, including UKRI, Innovate UK, Local Enterprise Partnerships and devolved and local government to ensure that the benefits are felt across the UK.



### Recommendations

- Expand the Made Smarter pilot to support SMEs to adapt and thrive in the "new normal"
- R&D as a way through the crisis: protect the innovation pipeline, future-proof and build resilience
  - Front-load public funding in multi-year programmes
  - Introduce agile and rapid Collaborative R&D programmes to promote industry-university collaborations and knowledge exchange
  - Boost support for late-stage R&D and demonstration
  - Maintain and improve the UK's competitive package of tax incentives for companies to innovate
- Developing globally leading capabilities
- Use the Industrial Strategy Challenge Fund to stimulate precompetitive collaboration to address future innovation needs and opportunities
- Make innovation a key component of the public procurement process to bring best value for money to the public purse
- Support regulators to adapt rapidly to innovation and new practices.

**"Dramatic changes can help opportunists. And I mean "opportunists" in the nicest way. It's a time for talking some risks in a changing world."**

**Sir David Grant CBE FREng  
non-executive Director of  
Renishaw Plc, IQE Plc,  
and Chair NPL**

Although not explored here, the sustainability, capabilities, capacity and success of UK universities, research and technology organisations and hightech innovative start-ups is crucial to industry R&D and innovation activities.

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## Our grid

Please try to lock core elements, such as text boxes, images and logos to an appropriate area of the vertical grid to ensure visual consistency across our suite of marketing collateral, and the format of the design hangs together.

We work to a six column grid, with 5mm gutter. This allows us to be a little bit flexible with our designs while ensuring continuity.

Recommended margin sizes

A0 = 50mm

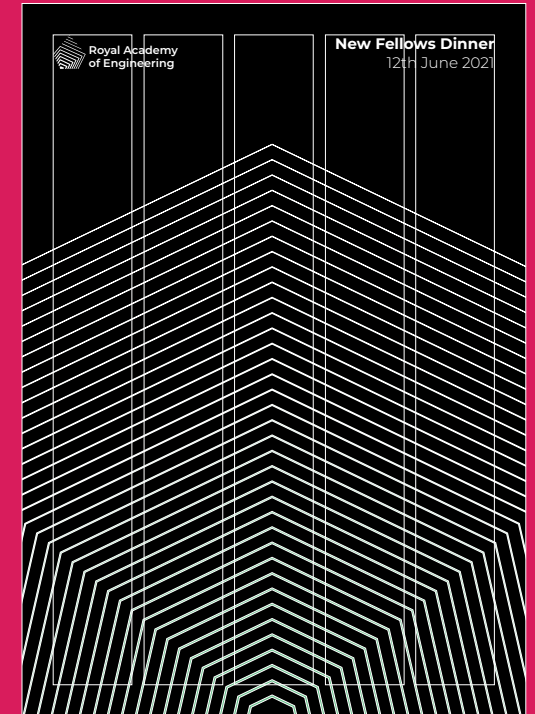
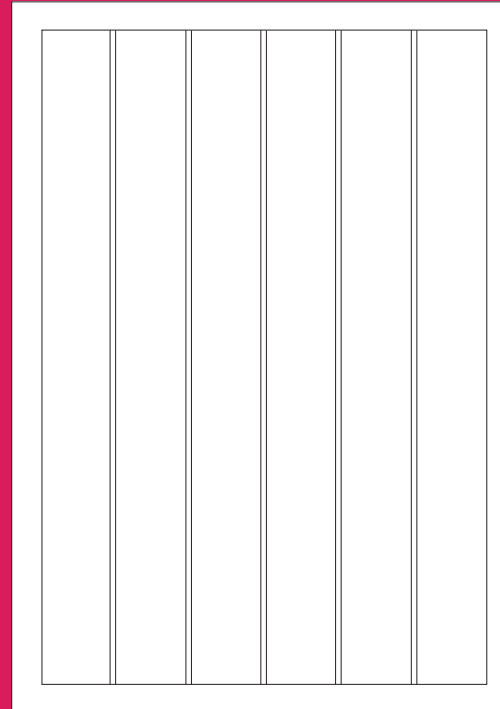
A1 = 35mm

A2 = 25mm

A3 = 18mm

A4 = 13mm

A5 = 9mm



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## Pattern

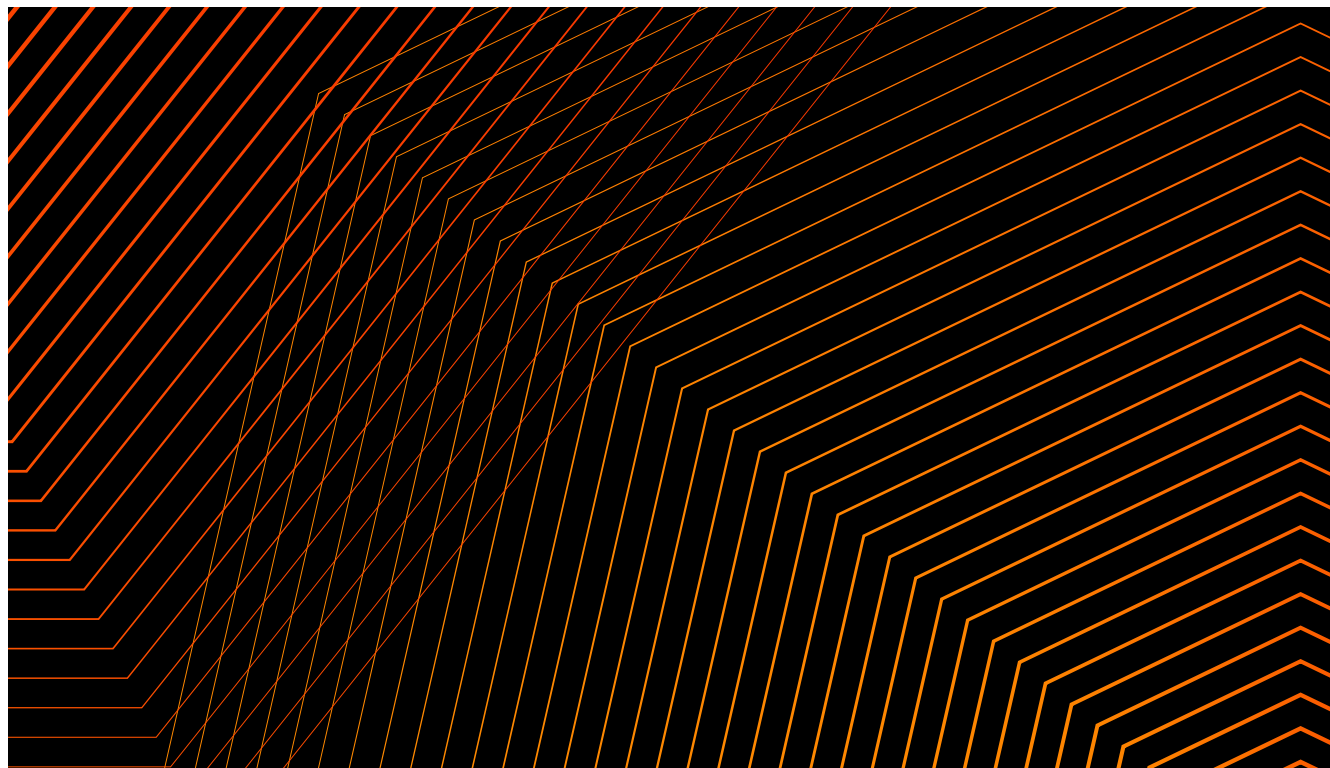
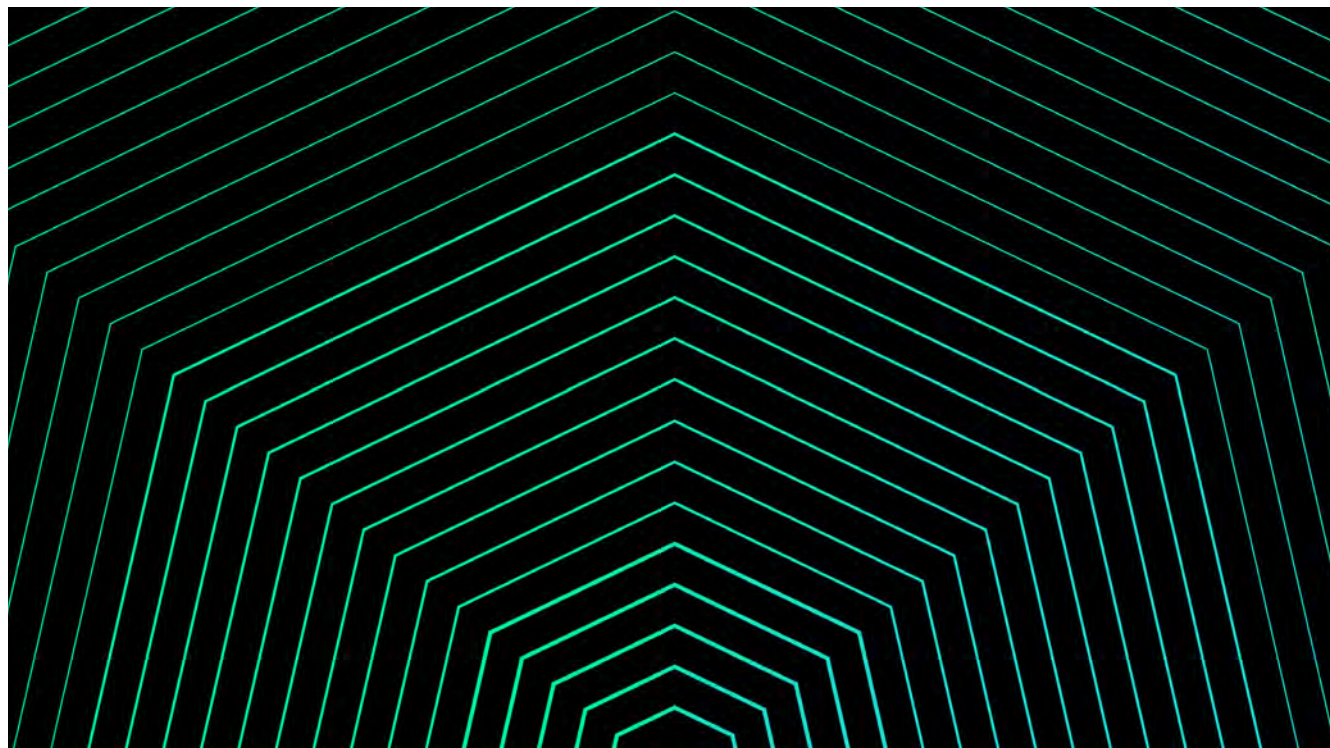
Patterns can be used as supporting graphics to add dynamic interest to editorial spreads, or as a hero visual on a black or white cover or poster alongside our brand logo and simple statement text.

There is no regimented grid that should be followed when using our patterns, however the designer should use initiative to ensure the format is balanced and aesthetically pleasing.

One pattern can be used symmetrically as shown opposite, or two patterns can be overlapped using two separate colours to create dynamic visuals. No more than two patterns should be used in any one visual.

We advise that gradients are used for hero content such as covers and posters, where as solid colours from the palette are used when the patterns are a supporting graphic internally within a document. Typography should never be used on top of our pattern to ensure maximum cleanliness and legibility of design.

Our pre-approved constructed patterns can be found within the brand asset package provided alongside these guidelines. Examples of best practice can be found in the 'Applications' section of these guidelines.



## Identity

**Overview**  
**Logo**  
**Colour**  
**Typography**  
**Grid**  
**Pattern**  
**Shape**  
**STEM**

## Shapes

Our shapes are a key asset in our hero communications.

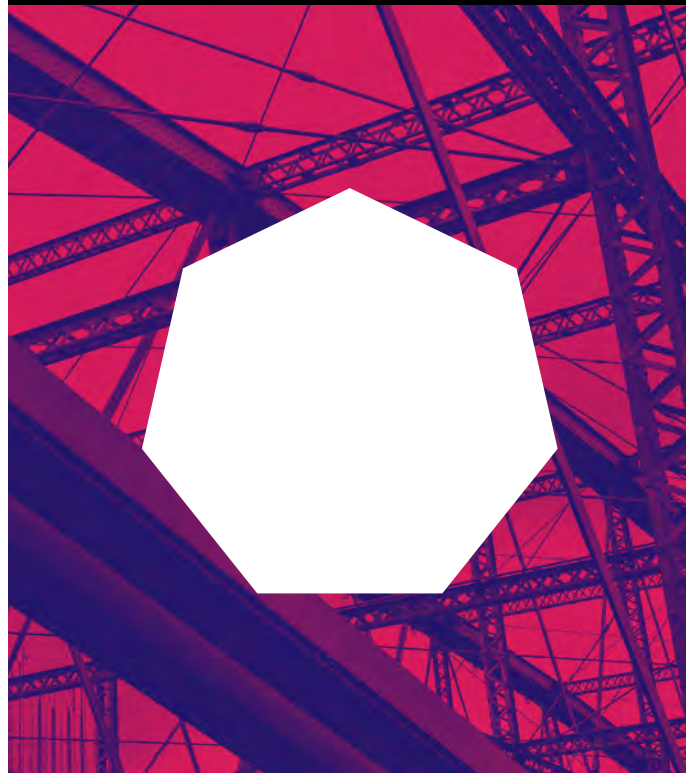
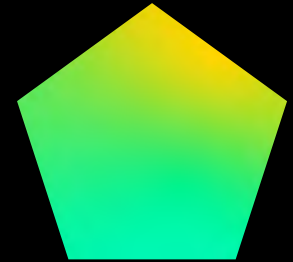
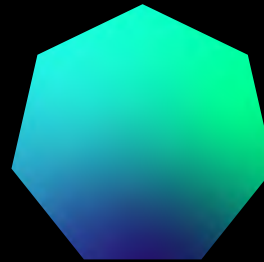
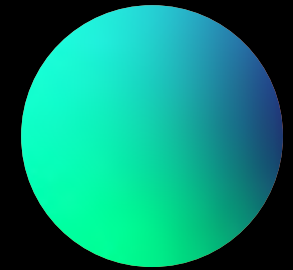
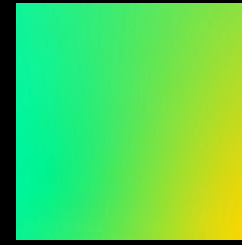
Our gradients can be used within any of the shapes shown opposite to provide a bold and interesting background to title text or statements.

Solid black or white shapes can be used over duotone photography to contain text such as titles or statements.

On a plain black or white background the shapes should be filled with a gradient for hero communications, or a core colour from the palette can be used internally within a document.

When using an outlined shape, the stroke can be a gradient or a solid colour.

Our pre-approved constructed shapes can be found within the brand asset package provided alongside these guidelines. Examples of best practice can be found in the 'Applications' section of these guidelines.



## Identity

### Overview

### Logo

### Colour

### Typography

### Grid

### Pattern

### Shape

### STEM

## STEM resources

Our STEM resources are key tools when we talk to pupils at secondary school level, and as such our overarching marketing comms deviate from the core brand styling in order to tailor our imagery and tone of voice accordingly.

The imagery is 'engineered', through a layered cut-out effect that is both playful and professional. It is fun, but never silly.

The visual style should be employed to illustrate the subject in question on covers or header slides, with spot illustrations of the same style used internally to support key information. The general approach to internal documents should be approached as outlined previously, with the introduction of illustrations being the only difference.

Full bleed coloured backgrounds should follow a core colour from our palette, with the supporting illustration manipulated to complement the palette.



Messaging

Identity

Photography

Print

Applications

## Photography

People  
Structure/  
Product/  
Environment  
Duotone

### People photography

Top level photography should seek to use a reportage style to give the brand a more professional and 'human' face. This type of photography feels real and authentic and this helps the public to relate to it.

Our photography should always represent a diverse range of people, and avoid narrow stereotypes

We use a dynamic mix of unfiltered and duotone photography for images of people when used internally within a document or on our website.

When photographs of people are used as a hero shot on a cover or poster, our duotone filter should always be used for maximum interest, using bold colours to enhance key messaging.



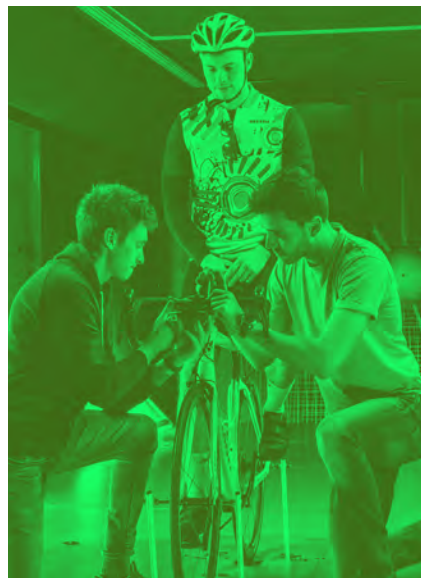
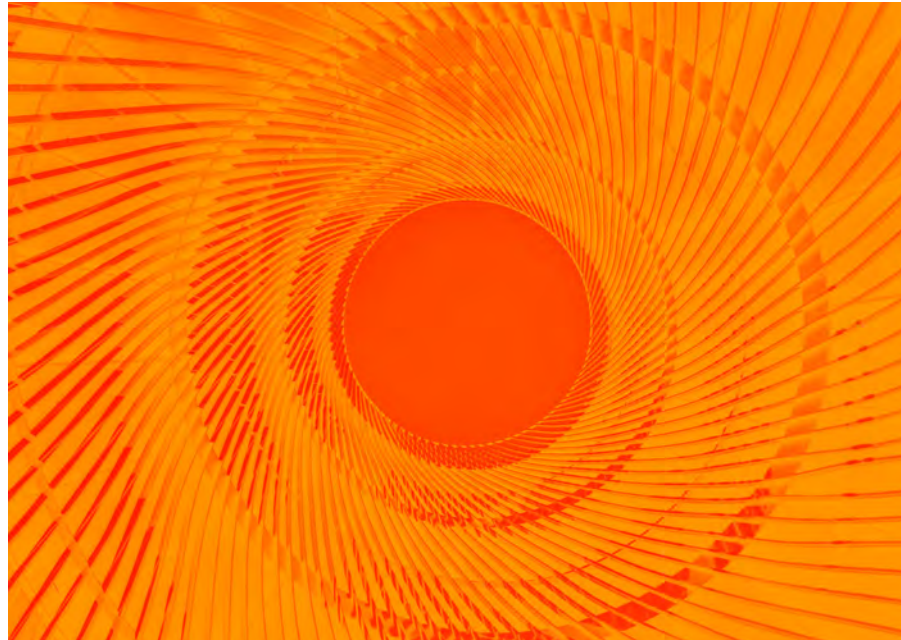
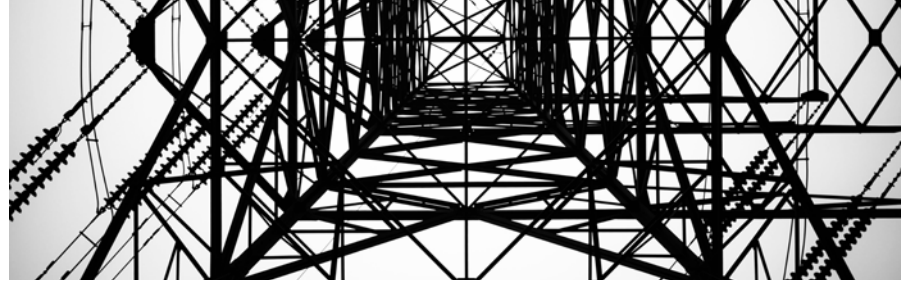
## Photography

People  
Structure/  
Product/  
Environment  
Duotone

### Structure/Product/ Environment

As with our photography of people, photographs of the environment, structures and products can be both duotone and unfiltered, but should always use our duotone effect for covers and campaign material.

These photos are intended to hero the precision and brilliance of engineering and can be used anywhere. For example in an annual report, instead of a photo of an accountant and a calculator, we should use a photo of a structure.





## Photography

People  
Structure/  
Product/  
Environment  
Duotone

## Duotone

To ensure consistency in the duotones used across our communications, we have created a pre-determined set of complementary colours that create suitable contrast and complement our brand aesthetic.

When using a number of duotone images across a document a spread of colours should be used to ensure visuals do not become repetitive.

A master Photoshop file for these duotones can be found within the brand assets package provided alongside these guidelines.



## Creating duotones

We have created a master duotone file that should be used to create any duotone effect for our brand.

The step by step instructions illustrated opposite show the simple process involved.

Please note, the shade of green used for the duotone is different to the shade in the palette. This is to ensure vibrancy.

Colour codes (HEX) for the duotone colours are below.

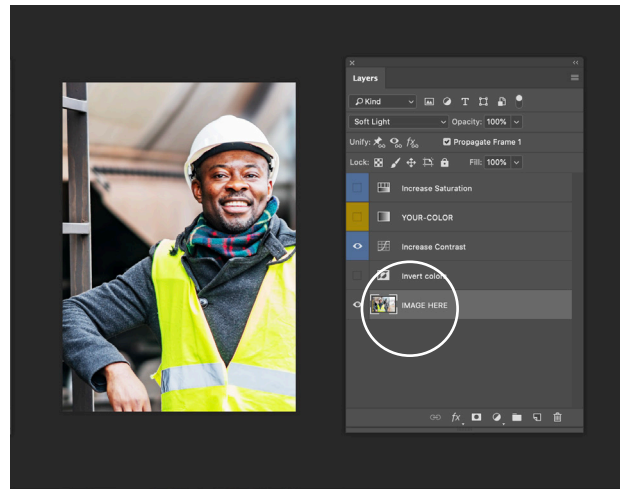
Green (#3f6f19) to light (#18fe66)

Orange (#f73600) to light (#ff962f)

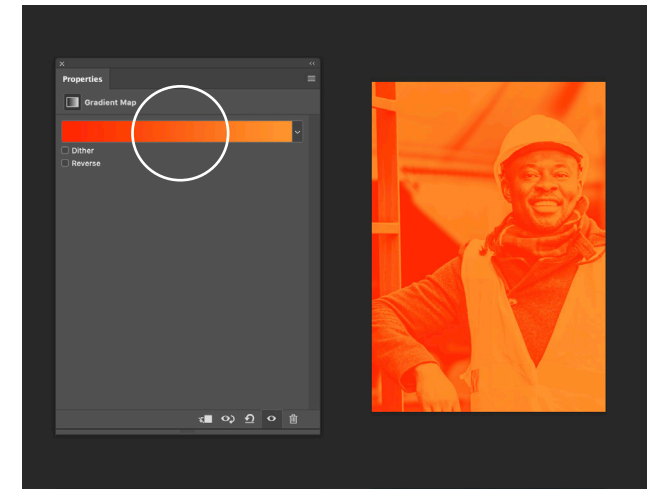
Purple (#21176b) to light (#b2bff0)

Blue (#21176b) to light (#24d6d1)

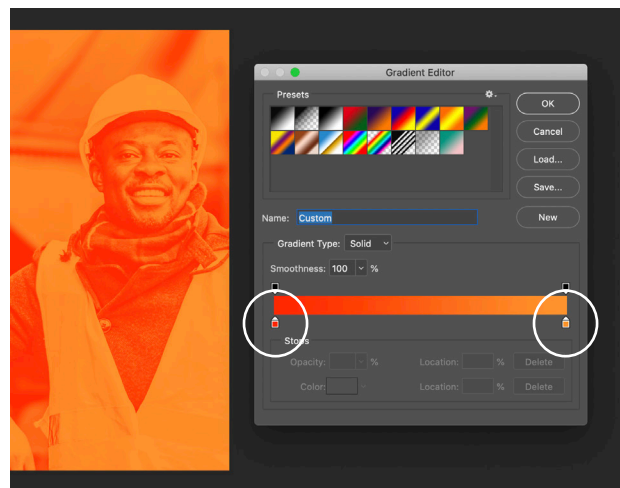
Pink (#21176b) to light (#d91c5c)



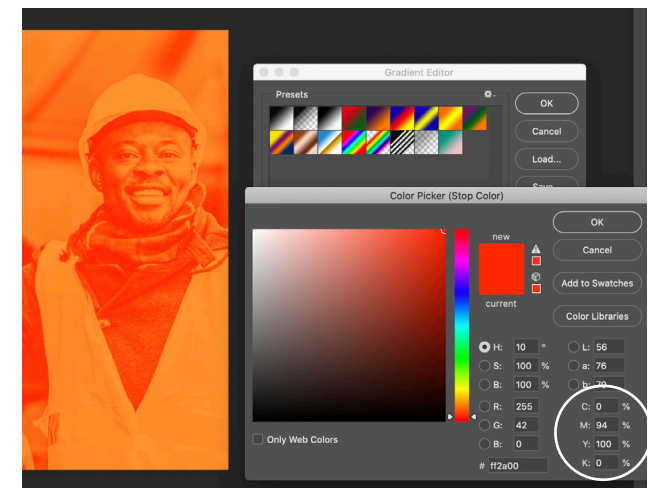
1. Place your image into the file and position the layer at the bottom of the group as illustrated here. This will ensure the effect works as intended.



2. Clicking on the 'YOUR COLOUR' layer will show a gradient map in the 'Properties' panel. By double clicking on this gradient, a further colour palette window will appear, from which you can alter the colours accordingly.



3. On the gradient, double click the swatch tabs at either end of the gradient window, as shown above. This will bring up a palette from which you can change the colour value by entering the references as specified on the previous page.



4. When both values are selected, your duotone is ready to be saved. **Please note:** as our master file is large, we recommend saving over the original .psd file and exporting the image as a single layered .tiff file under a new file name.

Messaging

Identity

Photography

Print

Applications

Print

Stock  
Method  
Premium print

### Choosing stock

### Paper stock

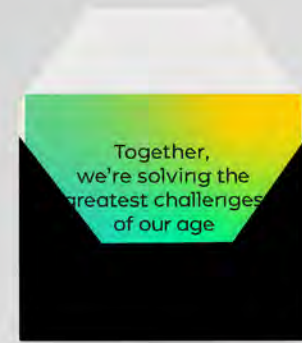
When choosing stock we recommend that you always choose an uncoated paper. Try to avoid satin or gloss as we don't want to produce collateral that has a shiny laminate effect.

We strongly recommend recycled and Forest Alliance certified paper where possible for all our printed collateral.

### Paper weight

We recommend the following gsm as a minimum for the following formats:

- Cover = 250gsm
- Inside pages = 115gsm
- Leaflet = 170gsm
- Business card = 350 gsm
- Stationery (letterhead / comp slip) = 130gsm



## Print

Stock  
Method  
Premium print

## Print methods

Where possible, try to use four colour CMYK litho print. This will produce results that are high quality, but also affordable on higher quantity runs (e.g. anything with a print run over 250). All flagship documents should be printed litho (e.g. manuals and guidelines).

Digital print (which is effectively a laser print) can be used for smaller print runs below 250. Digital print can be very cost effective, but results can vary depending on the printer, so this should only be used for short-lived items, such as a leaflet for an event.

Finally, you may – from time to time – need to print with Pantone spot colours which have been provided in these guidelines. However, Pantones cannot be used to print photographs, so typically will be used in combination with litho. Pantone print should only be used for prestige documents.

DO NOT USE Pantone colours if you are printing CMYK. And NEVER USE RGB colours for any print work. Finally, please note the colour breakdown of our CMYK black is 0/0/0/100. DO NOT substitute this for a deeper black (e.g. 100/100/100/100) as this will place too much ink on the page which could cause fingerprints or smudging and affect the legibility of type.



## Print

**Stock**  
**Method**  
**Premium print**

### Premium print

For formal landmark events, presidential communications and development events, our brand adopts a separate style that exudes a premium tone of voice.

This is restricted to monochrome or indigo from the palette, alongside off-white and textured stock where possible. Foiling and spot UV printing is also encouraged, which will work particularly well in titles or when using patterns as illustrated opposite.



Messaging

Identity

Photography

Print

Applications



# Solving the greatest challenges of our age

 Royal Academy  
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From climate change to social inequality, we believe that engineers can help us to solve some of the greatest challenges of our age.

[www.raeng.org.uk](http://www.raeng.org.uk)



# Are you curious?



Royal Academy of Engineering

## If you're curious and love solving complex problems, or want to make a difference in the world, consider a career in engineering.

### Upcoming events

- 12th July 2020  
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- 14th August 2020  
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**Contact us**  
Royal Academy of Engineering  
Prince Philip House  
3 Carlton House Terrace  
London  
SW1Y 3DC

[www.raeng.org.uk](http://www.raeng.org.uk)  
[info@rae.com](mailto:info@rae.com)  
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Royal Academy  
of Engineering

Higher Education Partnerships  
in sub-Saharan Africa  
(HEP SSA) programme

# Creating graduates with the skills local industry needs

"I applied knowledge from my university courses such as engineering management, control engineering and machine design in my internship. I also developed communication skills, which I wasn't taught in school."

Ben Mwaba, Mechanical Engineering  
Student, University of Zambia

#africaprize

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Newsletter  
Summer 2020

Royal Academy  
of Engineering

## GPS inventors honoured at the Palace

On 3 December, the 2019 Queen Elizabeth Prize for Engineering (QEPrize) was presented at a ceremony held at Buckingham Palace. The QEPrize was awarded to four US engineers responsible for creating the first truly global, satellite-based positioning system – GPS.



HSH The Prince of Wales presented the trophy to Dr Bradford Parkinson, Hugo Fruehauf, Richard Schwartz, and Anna Marie Spilker, who accepted the award on behalf of her late husband, Professor James Spilker 3r. Dr Bradford Parkinson – the ‘father of GPS’ – led the development, design, and testing of the system. Hugo Fruehauf developed the highly accurate, miniaturised atomic clock needed for operation, and Richard Schwartz engineered the radiation-hardened satellite. Professor James Spilker was the main designer of the GPS civil signal and, with the team at Stanford Telecommunications, built the receiver that processed the first GPS satellite signals.

(L-R) Lord Browne, Richard Schwartz, Paula Chowns, Dr Bradford Parkinson, Hugo Fruehauf, Anna Marie Spilker (wife of Professor James Spilker)

Lord Browne of Madingley FREng FRS, Chairman of the Queen Elizabeth Prize for Engineering Foundation, highlighted the critical role of collaboration in engineering, and groundbreaking innovations such as GPS. ‘Our laureates’ success was the result of inter-disciplinary collaboration, a drive for excellence, and an ability to turn the fruits of scientific discovery into practical solutions. That is what engineers do,’ he said. The system combines a constellation of at least 24 orbiting satellites with the ever-growing number of ground stations and receiving devices. Today, an estimated four billion people around the world use GPS. At just \$2 per receiver, GPS provides an accessible service and a powerful tool that people can integrate with their applications.

One of the prize’s aims is to inspire the next generation of engineers. Representatives from QEPrize donor companies, leading young engineers from the 2019 Create the Trophy Network, and the winner of the 2019 Create the Trophy competition, 17-year-old Jack Jang from Hong Kong, were invited to the event. Ambassadors and High Commissioners from around the world were also in attendance.

The day before, the 2019 laureates and the Create the Trophy winner met with industry experts from a breadth of engineering disciplines at a lunch hosted by the City of London Corporation at the Guildhall. Representing the Lord Mayor, Alderman Timothy Hailes JP paid tribute to the winning engineers.

#raengnews  
www.raeng.org.uk/newsletter-summer2020

Newsletter  
Summer 2020

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Royal Academy  
of Engineering

## Stimulating R&D for a faster and better recovery

Stimulating R&D for a faster and better recovery  
June 2020

A knowledge and innovation-led economy remains the best strategy for future prosperity. Engineering has huge potential to contribute to a resilient UK economy that works for all, with innovation improving productivity, safety and security across the UK and beyond.



Here, the Royal Academy of Engineering sets out near-term interventions to ensure R&D in businesses of all sizes in the UK stays on track to deliver the government's ambitions and support a rapid and faster recovery from the COVID-19 crisis. Following a rapid and faster recovery from the COVID-19 crisis, interventions are targeted towards supporting those parts of the business R&D process most at risk: business-university partnerships, pre-commercial development activities and technology diffusion. The interventions need to be delivered by a variety of organisations, including UKRI, Innovate UK and local Enterprise Partnerships, and devolved and local government to ensure that the benefits are felt across

the smarter pilot to support SMEs to adapt to the crisis; protect the innovation pipelines; invest in multi-year programmes of collaborative R&D programmes and industry collaborations and

the UK's competitive package for companies to innovate

the Strategy Challenge Fund to stimulate precompetitive R&D to address future innovation needs and opportunities

to bring best value for money to the public purse

Support regulators to adapt rapidly to innovation and new practices.

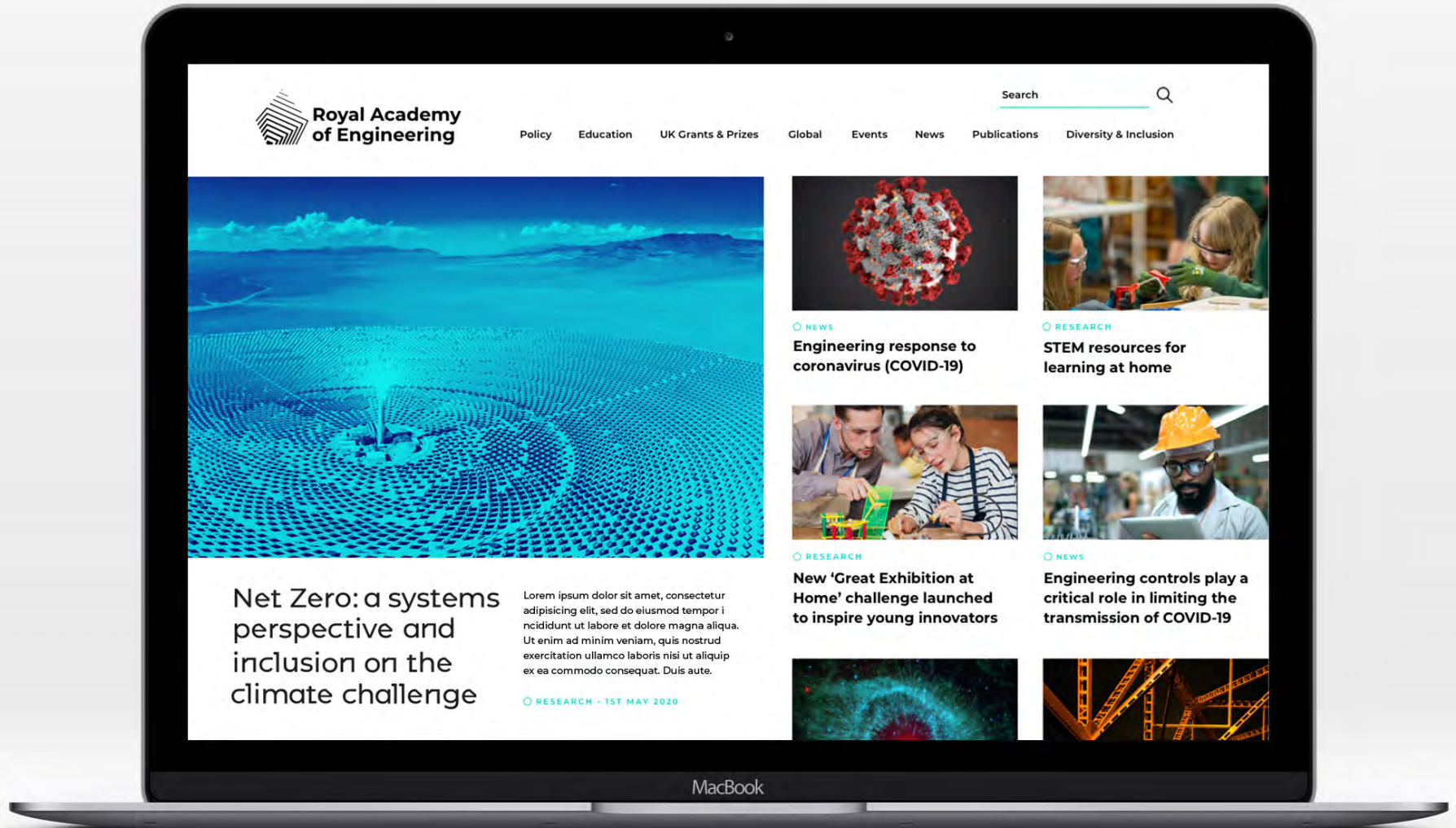
“Dramatic changes can help opportunists. And I mean opportunists” in the nicest way. It’s a time for taking some risks in a changing world.”

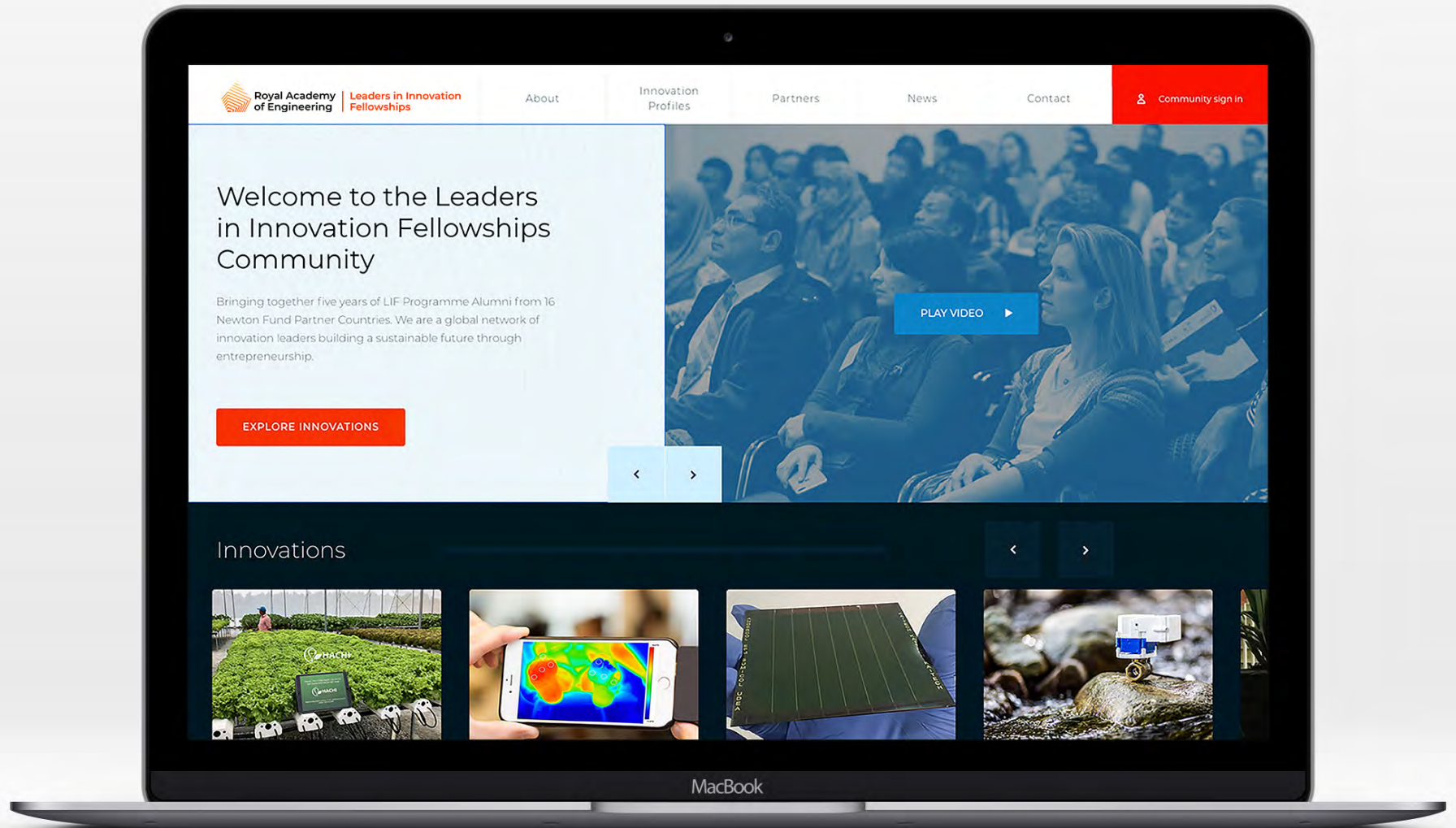
Sir David Grant CBE FREng non-executive Director of Renishaw Plc, IQE Plc, and Chel HPL

Although not explored here, the sustainability capabilities, capacity and success of UK universities, research and technology organisations and hightech innovative start-ups is crucial to industry R&D and innovation activities.

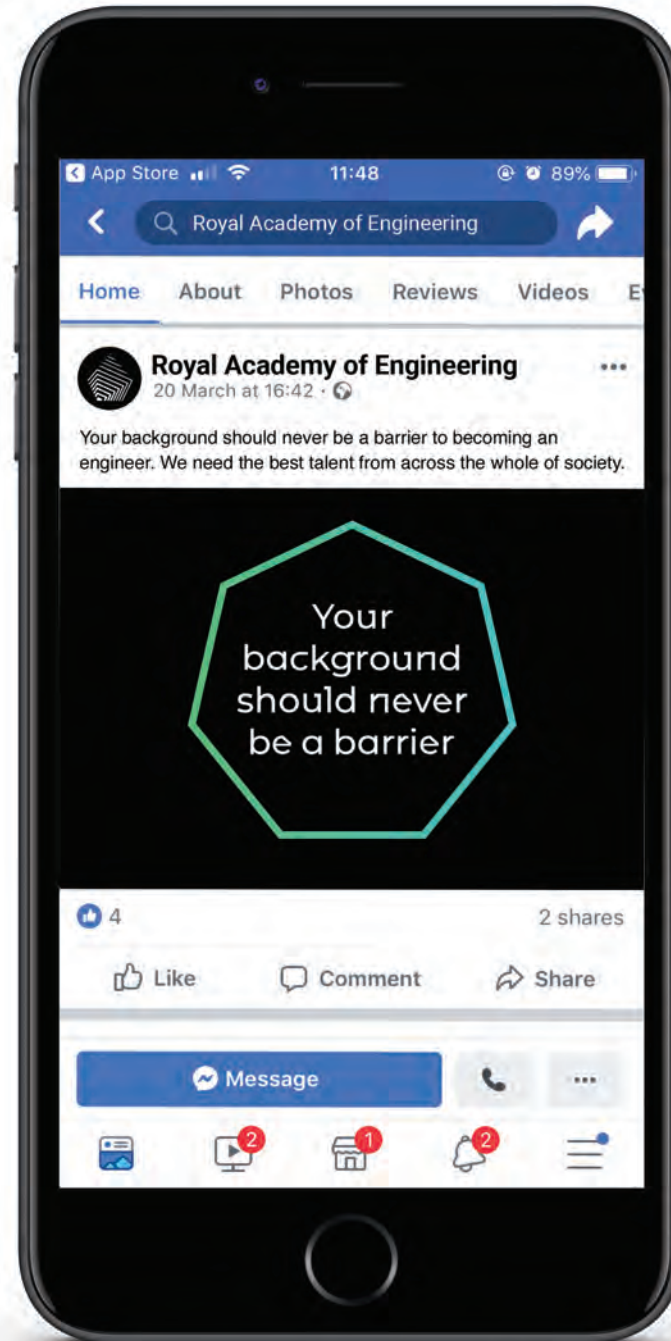
#raengnews  
www.raeng.org.uk/research-innovation







## Applications



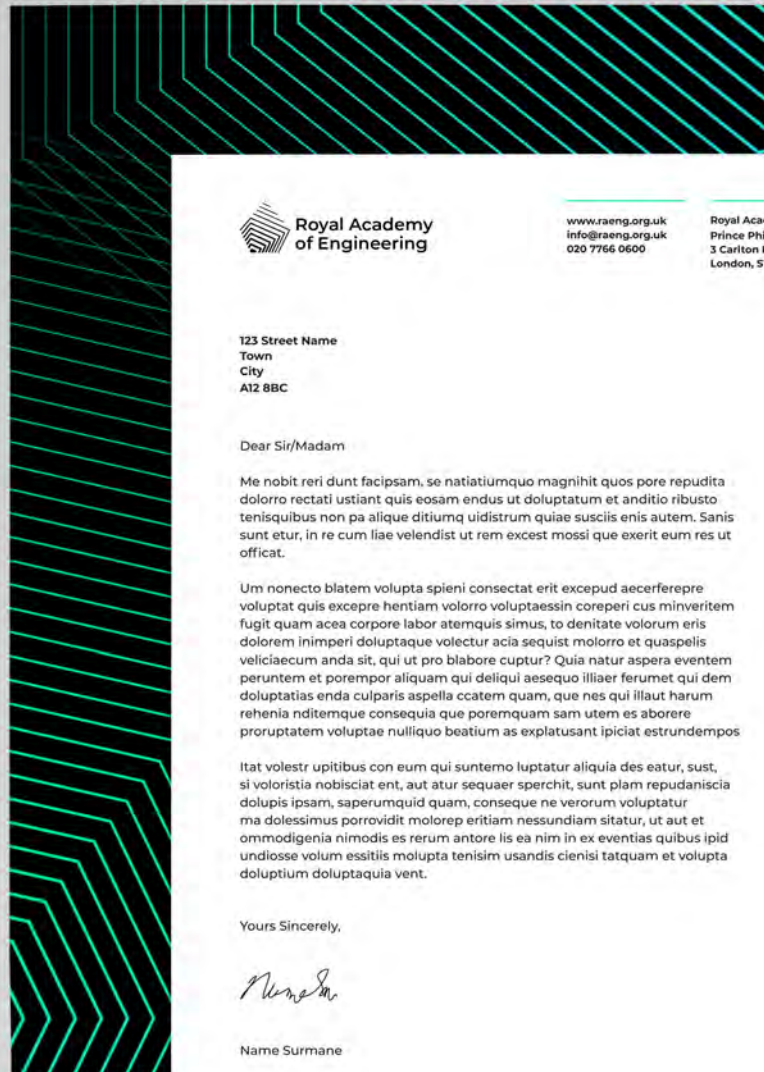
Applications






Applications





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020 7766 0600

Royal Academy of Engineering,  
Prince Philip House  
3 Carlton House Terrace,  
London, SW1Y 5DG

123 Street Name  
Town  
City  
A12 8BC


Dear Sir/Madam

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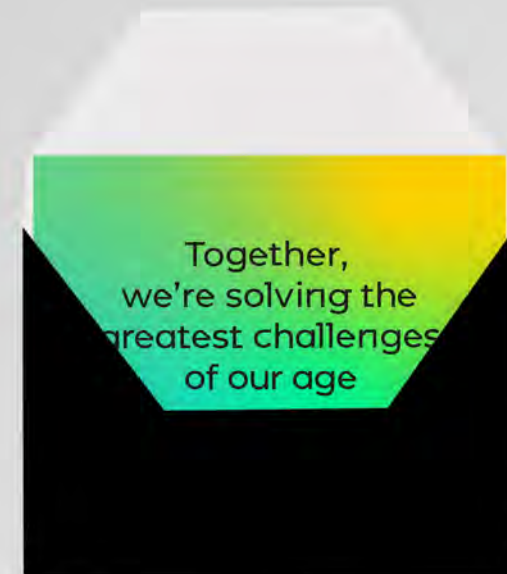
Yours Sincerely,



Name Surmane

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**Engineering for a sustainable society and inclusive economy**



 **Royal Academy of Engineering**

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**Engineering for a sustainable society and inclusive economy**

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of Engineering

Solving the  
greatest  
challenges  
of our age

From climate change to social inequality,  
we believe that engineers can help us  
to solve some of the greatest  
challenges of our age.

Lloyd's Register  
Foundation

**Thank you for following our guidelines.**

If you have any questions please  
email Gemma Hummerston at  
**[gemma.hummerston@raeng.org.uk](mailto:gemma.hummerston@raeng.org.uk)**



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