- **Acetate**
  A plastic transparent cover sheet. Ideal for protecting handbooks
- **Artwork**
  The images / text that are to be printed (usually artwork is supplied digitally as a PDF). As a general rule, artwork should be supplied as a high resolution PDF with images at 300 pixels per inch (see below), with crop marks and 3mm bleed
- **Binding**
  Method of securing pages within a document:
  - **Hardback Binding**
    Sheets inserted and glued on spine or stitched within hard back cover. Used for binding of dissertations / thesis.
    When Hardback Binding in Print Services, there is a maximum of 600 pages
  - **Perfect Binding**
    Pages clamped and glued together (square spine like paperback book) and then cover fixed on and the item is trimmed to size.
    When Perfect Binding in Print Services, there is a maximum of 400 pages
  - **Plastic Comb Binding**
    Holes drilled down side of the document and a plastic binding inserted. The book can be opened flat.
    When Comb Binding in Print Services, there is a maximum of 350 sheets
  - **Soft Binding**
    Heat sealed adhesive strip with acetate front and back with a spine, pages are inserted and glued in.
    When Soft Binding in Print Services, there is a maximum of 300 sheets, the spine is red
  - **Saddle Stitched**
    Stapled in 2 places through the middle fold of the sheets. The number of pages (not including the cover if this is on a different weight of paper) needs to be divisible by 4.
    When Saddle Stitching in Print Services, there is a maximum of 88 pages
  - **Wire Binding**
    Holes drilled down side of the document and wire binding inserted. The book can be opened flat.
    When Wire Binding in Print Services, there is a maximum of 250 sheets
- **Backing up**
  Printing the reverse side of a sheet already printed on one side. Results in a double side printed sheet
- **Black and White**
  Printed in single colour (black)
- **Bleed**
  The area outside of the crop marks where the design extends into. This will be trimmed off at the finishing stage
- **Booklet**
  Normally a publication made up of least 8 pages and must always be a multiple of 4 pages. The document is folded and saddle stitched. Booklets can be any size, but are most commonly either A4 or A5
- **Carbonless paper or No Carbon Required (NCR)**
  Paper coated with chemicals that enable the transfer of an image from one sheet to another with pressure from writing or typing. NCR pads are ideal for handwritten forms that require

duplicate copies. Print Services offer white, blue, pink, green or yellow pages and can also create numbered sheets as well as binding into pads

- **Collate**
  To bring together and organise printed matter in a specific order
- **Corporate Visual Guidelines**
  These are the standards and rules an organization uses to maintain brand consistency across all material that carries the corporate identity. Please consult the University of Bristol brand guidelines when producing any print-based publicity material on behalf of the University
- **CMYK (subtractive colours)**
  Abbreviation for the process colours of Cyan, Magenta, Yellow and Black – used in 4 colour printing. The inks can be printed and combined in a variety of different proportions to produce a wide range of colours
- **Creep**
  Creep occurs when pages are collated for binding and the thickness of the paper results in the inner pages extending beyond the outer pages. The edge is usually square cut in the binding process resulting in the inner pages measuring less than the outer pages. This will result in text on the inner pages being closer to the trim than those on the outer pages. This only becomes a problem on saddle stitched books, though it is possible to make adjustments to compensate for this in the pre-press process
- **Crop (image)**
  To trim the edges of a picture or page to make it fit or remove unwanted portions
- **Crop Marks**
  Printed lines placed on the artwork to indicate the edge of the finished job. Used as a guide when cutting or trimming documents to the finished size. Also see **Bleed** above
- **Die Cutting**
  Used to punch out irregular shapes or windows in a sheet, e.g. for a folder. Dies are usually made by hand from steel. See also **Laser Cutting**
- **Digital Printing**
  Printing process in which information is transferred from a computer directly onto paper, without the need for film and printing plates. Typically printed using four colour process though some digital presses have the ability to print some special colours too. Digital printing is cost-effective for black and white print runs and small to medium colour print runs. It allows for special techniques such as mail/data merge, personalisation and print-on-demand
- **Drilling**
  To make holes in paper with a rotating die, often used for items to be placed into a ring binder
- **Duplex / Double Sided**
  Printing on both sides of a sheet of paper
- **Encapsulation**
  A plastic coating providing a rigid, watertight covering
- **FSC Accredited**
  Papers which have been certified by the Forest Stewardship Council. FSC promotes responsible forest management and provides a chain of custody where papers can be traced back to the forest where the trees were grown. Forests managed to FSC standards offer benefits to both local and wider communities, including cleaner air and water, as well as helping to mitigate the effects of climate change

- **Finishing**
  Any process that follows the printing of a sheet. This can include guillotining, folding, creasing and binding
- **Flyer**
  A promotional printed item with no folding or finishing requirements. Common sizes for flyers are A7, A6, A5 and A4, though any size can be printed providing it fits onto the sheet. Flyers can be printed single sided or double sided
- **Font**
  A set of printed letters, numbers, and other symbols of the same style used for typesetting
- **GSM**
  Grams per square meter is the unit of measurement for paper used in printing. Thicker board stocks are sometimes referenced by their thickness – see **Micron**
- **Guillotine**
  A machine for cutting a large number of sheets of paper accurately
- **Halftone**
  The process by which a continuous tone image is simulated by a pattern of dots of varying sizes
- **Header/Footer**
  The margin at the top (header) and bottom (footer) of the page
- **Hickie**
  Spots or imperfections in printed items (litho jobs) due to dirt on press, dried ink, paper particles etc
- **Justification (text)**
  The position of text within a text box. Text can either be left, centre, right or force justified. Force justified is where the text will be made to fit to both the left and right, it can result in strange effects on a small text box or with text of a large point size
- **Imposition**
  The arrangement of pages on a sheet so that, when printed, folded and bound, will result in pages following the correct sequence
- **InDesign**
  The desktop publishing software by Adobe that is used for the majority of design for print
- **Laminate**
  To protect paper or card by applying a transparent plastic coating by heat or pressure. Lamination can be in a variety of finishes, though the most common are matt and gloss
- **Landscape**
  Page orientation where the horizontal edge is greater than the vertical edge
- **Laser Cutting**
  Used to cut out irregular shapes or windows in a sheet, e.g. for a folder. Laser cutting is particularly suited to small quantities or where shapes are particularly intricate. See also **Die Cutting**
- **Leaf**
  A single sheet of paper within a bound booklet. If printed both sides, this represents 2 pages
- **Leaflet**
  Leaflets are used to convey information and are commonly used to advertise products, services, events and activities. Common sizes for leaflets are A7, A6, A5, A4 and A3, though any size can be printed providing it fits onto the sheet. Leaflets can also be folded, though this is dependent upon the thickness of the stock

- **Litho**
  A printing process by which the inked image to be printed is transferred (offset) first to a rubber layer before coming into contact with the paper which takes up the inked areas. Litho print has traditionally been regarded as higher quality than digital print, however, modern digital presses can achieve a quality close to that of litho printing presses. A litho press will take longer to set up and is therefore more costly to 'make ready'. However, once the press has been made ready, sheets are very cheap to print as they can run at speeds of 15000 sheets an hour or more. This makes litho print the perfect solution for longer print runs
- **Micron**
  The measurement of thickness of a paper or board. Usually papers are referenced by their weight (see **GSM**), but often boards are referenced by their thickness
- **Page**
  A single side of a leaf (see above)
- **Pantone (for litho print)**
  Pantone is a standardised colour matching system widely used in many industries around the world. Many Pantone colours are unachievable my mixing together cyan, magenta, yellow and black, though they are also used for greater colour consistency. Whilst Pantone in print is used primarily in litho print, the gamut of digital CMYK is capable of making a close Pantone match to approximately 90% of the Pantone library
- **PDF - Portable Document Format**
  PDF is a file presentation format which combines images, drawings, layouts and text into one file. All design software are capable of creating PDF files and they have become the preferred format for printers. Please note that whilst it is possible to make basic corrections to a PDF file, all amends should be carried out on the master artwork, usually an InDesign file
- **Perforation**
  Running a dotted score into paper that allows the paper to be torn off easily
- **Portrait**
  Page orientation where the vertical edge is greater than the horizontal edge
- **PPI**
  Pixels per inch, which indicate the resolution of images. The more pixels per inch, the higher the resolution and the better quality the image. 300ppi is the recommended resolution for print
- **Pre-Press**
  All procedures associated with making a job 'print ready', such as design, artwork, proofs, set-up etc
- **Proof**
  A print or digital sample of the document produced for the client to sign off as ready to print. A proof could be in the format of a PDF which will be accurate for content but not colour. If produced for a litho print run, the proof will be produced from a digital printer and will simulate the colour on press as closely as possible, however, should not be relied on. Only a proof produced on the production equipment will be accurate, for digital printing this is inexpensive, for litho printing, this can become expensive
- **RGB (additive colours)**
  3 colour split (Red, Green, Blue). Typically used for web based images. All RGB use in a file needs to be converted to CMYK before imaging, this conversion is undertaken by the **RIP** – see below. It is advisable to avoid RGB images within artwork as unwanted or inconsistent

print results may occur as a result of the **RIP** converting to CMYK. If using RGB images, it is always advisable to request a pre-production proof

- **Raster Image Processor (RIP)**
  The process by which vector data is converted to raster data for the imaging process
- **Scanning**
  Scanning of documents or images and converting into digital data. Scanned documents can have OCR (Optical Character Recognition) which allows searches to be carried out on the file. It is also possible to scan large format documents or plans up to 900mm wide
- **Score / Crease**
  To indent a line in the card to make folding easier and stop the print from cracking
- **Show Through**
  The degree to which printing is visible through paper. Commonly seen on lightweight papers
- **Shrink Wrapping**
  Method of packing printed products by wrapping them in plastic, then shrinking by heat
- **Silk Screen**
  Silk screen printing allows print onto many different substrates though is used primarily for printing onto fabric. Again, it is costly to set up but cheap to run
- **Stock**
  Paper or card to be printed on.