Almost all modern sewing machines offer a zigzag stitch—a configuration that takes one stitch to the left and one stitch to the right.

To use a zigzag stitch, install a presser foot with a wide hole and a needle plate with a similarly shaped hole. Without these, the needle will hit the foot and/or needle plate opening and break. For dense zigzagging or satin stitching, be sure the presser foot has an indentation on the underside to allow the stitch build-up to pass through easily (1).

Length and Width
The zigzag stitch width and length can be adjusted to change the appearance of the stitch. The length refers to the distance between the stitches, and the width refers to the horizontal span. Depending on the machine, these may be pre-set options, or they may be adjustable, with larger numbers being wider and/or stitches farther apart (2).

Tension
A zigzag stitch should lie flat against the fabric without tunneling. On some lightweight fabrics, it may be necessary to use a stabilizer underneath when sewing on a single layer.

Seaming
When used to stitch a seam, a narrow zigzag allows flexibility and it’s particularly good for knit fabrics or wovens made with stretch fibers. Using a zigzag for seaming helps to eliminate thread breakage and subsequent tears in areas subjected to stress.

Depending on the stitch width, it may be difficult to press seams open that have been stitched with a zigzag, so both seam allowances may simply be pressed to one side.

Seam Finishing
To help control fraying, zigzagging can be used to finish seam allowance edges. This may be done on the single-layer seam allowance, or on both together. Fabric may be trimmed close to a zigzag edge to prevent raveling.

Hemming
A zigzag is often used for hemming stretchable garments, like knit T-shirts or pants. Because of its inherent flexibility, the hem is able to stretch without breaking stitches.

When used on knits, a zigzag stitch can also create a lettuce hem. Simply stretch the hem of the garment as you stitch.

Couching
A zigzag is the perfect stitch to hold down yarns or novelty threads. When sewn with invisible thread, it provides a secure hold and lets the character of the strands show through. When sewn with a decorative thread, the stitch itself becomes a design feature.
Appliqué
An open zigzag or a satin stitch holds appliqués securely, covering raw edges with the threads of the stitch to prevent fraying.

Elastic
Because elastic needs to stretch for garment fit, the zigzag stitch is the likely choice for securing it in place. It allows the elastic to stretch as needed without breaking stitches.

Shell Edging
Using a widely spaced zigzag over a folded fabric edge creates mini-scallop patterning, perfect for straps, lingerie or blouse hems, and pintuck embellishment. Varying the length, width and thread tension will change how the scallop looks.

Button Sewing
A zigzag stitch is used to attach buttons by machine. Set the width to match the hole span in the button, and adjust the length to 0 so the machine stitches only back and forth in the holes. Some machines have an open-toe button foot to make it easier to see the holes.

Bartacking
When a wide zigzag is sewn in one place, it’s called a bartack. Bartacks are used at the upper corners of pockets for reinforcement and also to help secure belt loops in place on a garment.

Trim Applications
Like its cousin the straight stitch, a zigzag can be used to sew on all kinds of trims and laces, either along the edge or down the center of the trim, depending on the desired visibility.

Decorative Stitching
Combine a simple zigzag with decorative threads, and the stitch becomes an embellishment. Used singly or in multiple rows, it can create borders, stripes or other shapes for decorating garments or home decorating projects.

Zigzags also work well with double needles, but check your machine instruction book for any width limitations.

Gathering
Use a zigzag as a "casing" over heavy thread, dental floss or string to make gathering easy. Set the stitch width to easily span the strand and avoid catching it, then encase the length. Be very careful not to catch the threads in the zigzagging, and for more even gathering, use two rows (3). To gather, pull on the encased threads to the desired length, then tie off.

For more information on couching see SEW-lutions Guideline 17.215 Couching and for button sewing, see Sew-lutions Guideline 14.105 Replacing a Button.