



# VTU Dot: Multi-Page Educational Website

## Introduction

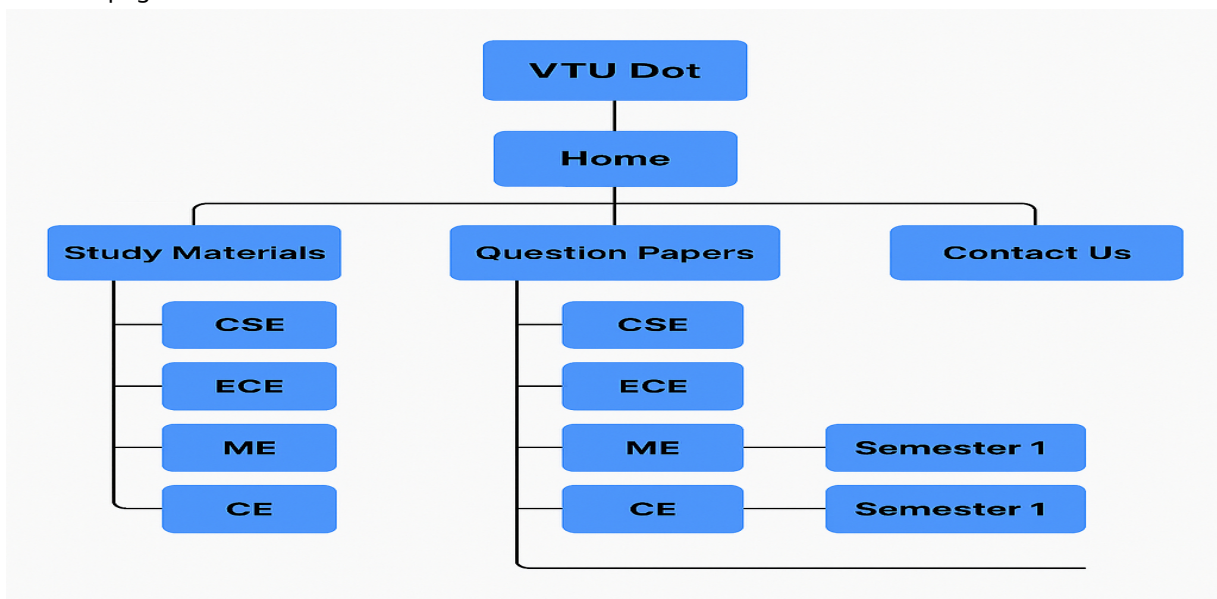
VTU Dot is a multi-page educational website designed for engineering students. It provides **study materials and previous-year question papers** for all major branches (CSE, ECE, ME, CE). Users can navigate to each branch's section and download PDF resources directly. The site is built using HTML5 and CSS3, with a clean, responsive layout, ensuring easy access to academic content. Core sections include a Home page, Study Materials page (with branches), Question Papers page (by branch and semester), and a Contact Us page.

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## Design Process Diagram

To plan the website, a sitemap/flowchart was created outlining the page hierarchy and navigation flow. We started by sketching the main pages and their sub-sections (Home, Study Materials by branch, Question Papers by branch/semester, Contact Us). For example, the **Study Materials** page branches into CSE, ECE, ME, and CE sections, each linking to downloadable resources. The **Question Papers** page branches by department and then by semester. The flowchart below illustrates this structure and the navigation flow between pages.



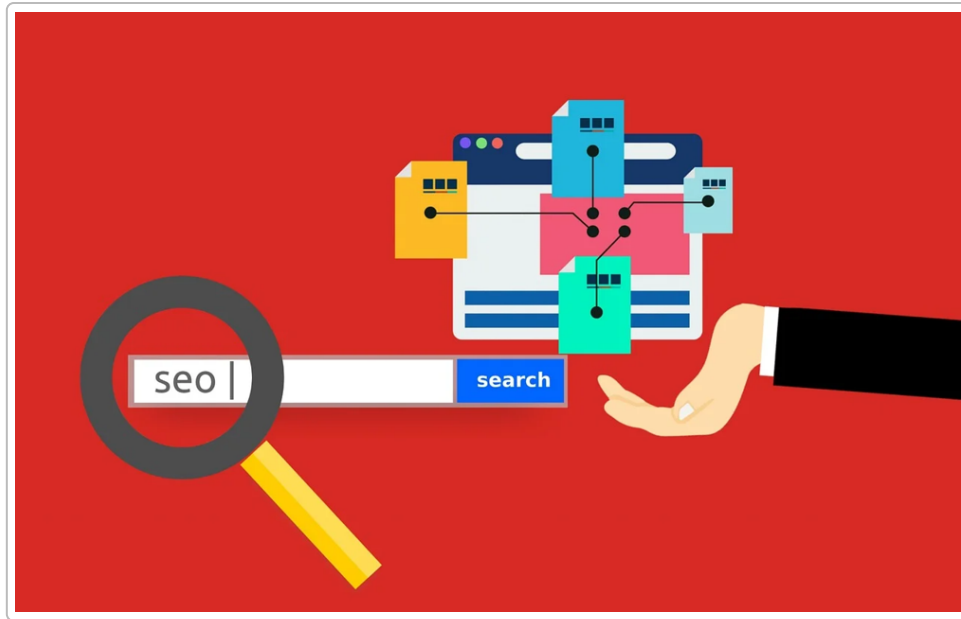


Figure: Sitemap flowchart of the VTU Dot website, showing Home, Study Materials (with branches), Question Papers (with branches/semesters), and Contact pages.

The design process emphasized clear navigation and user flow. We used HTML5 semantic elements (like `<nav>`) and organized navigation links in a list, as recommended for menus <sup>1</sup>. Each branch section was planned to contain links to PDFs (study notes or question papers). This high-level diagram helped ensure all required pages and links were included before coding.

## Implementation

### Home Page (HTML)

The Home page welcomes users and provides navigation to all sections. A `<nav>` element contains a horizontal menu built from an unordered list of links <sup>1</sup>. The layout features a header with the site title, a hero or welcome message, and links to the major branches. Here is a simplified HTML structure for **Home.html**:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>VTU Dot - Home</title>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <header>
    <h1>VTU Dot - Engineering Resources</h1>
    <nav>
```

```

        <ul>
            <li><a href="index.html">Home</a></li>
            <li><a href="study-materials.html">Study Materials</a></li>
            <li><a href="question-papers.html">Question Papers</a></li>
            <li><a href="contact.html">Contact Us</a></li>
        </ul>
    </nav>
</header>
<main>
    <section class="intro">
        <h2>Welcome to VTU Dot</h2>
        <p>Your one-stop portal for VTU study materials and past exam papers.
Select your department to begin.</p>
    </section>
    <section class="branches">
        <h3>Departments</h3>
        <ul>
            <li><a href="study-materials.html#CSE">Computer Science (CSE)</a></li>
            <li><a href="study-materials.html#ECE">Electronics (ECE)</a></li>
            <li><a href="study-materials.html#ME">Mechanical (ME)</a></li>
            <li><a href="study-materials.html#CE">Civil (CE)</a></li>
        </ul>
    </section>
</main>
<footer>
    <p>&copy; 2025 VTU Dot</p>
</footer>
</body>
</html>

```

The navigation bar uses a list of links, reflecting best practices (the `<ul>` element is ideal for menus <sup>1</sup>). External CSS (linked as `styles.css`) handles the styling.

## Study Materials Page (HTML)

This page organizes downloadable PDF links by branch. Each branch section has a heading and a list of materials. For demonstration, sample PDF links are shown (these could be actual `.pdf` files on the server). The HTML (`study-materials.html`) might look like:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>VTU Dot - Study Materials</title>
    <link rel="stylesheet" href="styles.css">
</head>

```

```

<body>
  <header>
    <h1>Study Materials</h1>
    <nav>
      <ul>
        <li><a href="index.html">Home</a></li>
        <li><a href="study-materials.html">Study Materials</a></li>
        <li><a href="question-papers.html">Question Papers</a></li>
        <li><a href="contact.html">Contact Us</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <section id="CSE" class="branch">
      <h2>Computer Science (CSE)</h2>
      <ul>
        <li><a href="materials/CSE_Algorithms.pdf" download>Algorithms Notes
(PDF)</a></li>
        <li><a href="materials/CSE_DS.pdf" download>Data Structures Notes
(PDF)</a></li>
      </ul>
    </section>
    <section id="ECE" class="branch">
      <h2>Electronics (ECE)</h2>
      <ul>
        <li><a href="materials/ECE_DSP.pdf" download>Digital Signal Processing
(PDF)</a></li>
        <li><a href="materials/ECE_Comm.pdf" download>Communication Systems
(PDF)</a></li>
      </ul>
    </section>
    <section id="ME" class="branch">
      <h2>Mechanical (ME)</h2>
      <ul>
        <li><a href="materials/ME_Thermo.pdf" download>Thermodynamics (PDF)</
a></li>
        <li><a href="materials/ME_Fluid.pdf" download>Fluid Mechanics (PDF)</
a></li>
      </ul>
    </section>
    <section id="CE" class="branch">
      <h2>Civil (CE)</h2>
      <ul>
        <li><a href="materials/CE_Structures.pdf" download>Structural Analysis
(PDF)</a></li>
        <li><a href="materials/CE_Water.pdf" download>Water Resources (PDF)</
a></li>
      </ul>
    </section>
  </main>

```

```

    </section>
</main>
<footer>
    <p>&copy; 2025 VTU Dot</p>
</footer>
</body>
</html>

```

Each `<a>` tag uses the `download` attribute so the linked PDF is downloaded when clicked <sup>2</sup>. The `href` points to the PDF file (e.g., `materials/CSE_Algorithms.pdf`) and the text labels the resource. In practice, the PDF files would reside in the specified folder on the webserver. This structure ensures all branches (CSE, ECE, ME, CE) have study material sections.

### Question Papers Page (HTML)

The Question Papers page is organized similarly by branch and semester. Students can download PDF question papers for each semester. Sample HTML (`question-papers.html`):

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>VTU Dot - Question Papers</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Question Papers</h1>
        <nav>
            <ul>
                <li><a href="index.html">Home</a></li>
                <li><a href="study-materials.html">Study Materials</a></li>
                <li><a href="question-papers.html">Question Papers</a></li>
                <li><a href="contact.html">Contact Us</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section id="CSE_QP" class="branch">
            <h2>Computer Science (CSE)</h2>
            <ul>
                <li><a href="papers/CSE_Sem1.pdf" download>Semester 1 Papers</a></li>
                <li><a href="papers/CSE_Sem2.pdf" download>Semester 2 Papers</a></li>
            </ul>
        </section>
        <section id="ECE_QP" class="branch">

```

```

    <h2>Electronics (ECE)</h2>
    <ul>
        <li><a href="papers/ECE_Sem1.pdf" download>Semester 1 Papers</a></li>
        <li><a href="papers/ECE_Sem2.pdf" download>Semester 2 Papers</a></li>
    </ul>
</section>
<!-- Additional branches (ME, CE) would follow similarly -->
</main>
<footer>
    <p>&copy; 2025 VTU Dot</p>
</footer>
</body>
</html>

```

This page lists branches and offers downloadable links to PDFs of previous-year exams. Again, the `download` attribute is used for ease of download. For a complete site, all semesters for all branches would be added similarly.

## Contact Us Page (HTML)

A simple contact page includes a form for students to send messages or feedback. It also contains institutional contact info. Example (**contact.html**):

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>VTU Dot - Contact Us</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Contact Us</h1>
        <nav>
            <ul>
                <li><a href="index.html">Home</a></li>
                <li><a href="study-materials.html">Study Materials</a></li>
                <li><a href="question-papers.html">Question Papers</a></li>
                <li><a href="contact.html">Contact Us</a></li>
            </ul>
        </nav>
    </header>
    <main>
        <section class="contact-info">
            <h2>Get in Touch</h2>
            <p>Email: support@vtudot.edu</p>

```

```

    <p>Phone: +91 12345 67890</p>
</section>
<section class="contact-form">
  <h2>Message Us</h2>
  <form action="#" method="post">
    <label>Name:</label>
    <input type="text" name="name" required>
    <label>Email:</label>
    <input type="email" name="email" required>
    <label>Message:</label>
    <textarea name="message" rows="4" required></textarea>
    <button type="submit">Submit</button>
  </form>
</section>
</main>
<footer>
  <p>&copy; 2025 VTU Dot</p>
</footer>
</body>
</html>

```

The form (unfunctional in this static site) is for illustration. Semantic HTML tags ( `<label>`, `<input>`, `<textarea>` ) ensure accessibility. Each page reuses the same CSS file and consistent `<nav>` structure for a uniform design.

## CSS Styling (CSS)

A single CSS file ( `styles.css` ) is used for all pages, providing a cohesive look. Key styles include a fixed navigation bar, branch sections, and responsive layout. Example CSS:

```

/* styles.css */
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
}
header {
  background-color: #004080;
  color: white;
  padding: 10px 20px;
}
header h1 {
  margin: 0;
}
nav ul {
  list-style-type: none; /* remove bullets */

```

```

    margin: 0;
    padding: 0;
    overflow: hidden;
}
nav li {
    display: inline;
    margin-right: 15px;
}
nav a {
    color: white;
    text-decoration: none;
    font-weight: bold;
}
nav a:hover {
    text-decoration: underline;
}
main {
    padding: 20px;
}
.branch {
    margin-bottom: 20px;
}
.branch h2 {
    color: #004080;
}
.branch ul {
    list-style-type: disc;
    margin-left: 20px;
}
.branch ul li a {
    color: #0066cc;
    text-decoration: none;
}
.branch ul li a:hover {
    text-decoration: underline;
}
.contact-form label, .contact-form input, .contact-form textarea {
    display: block;
    width: 100%;
    max-width: 400px;
    margin-bottom: 10px;
}
.contact-form button {
    background-color: #004080;
    color: white;
    border: none;
    padding: 8px 16px;
    cursor: pointer;
}

```



```

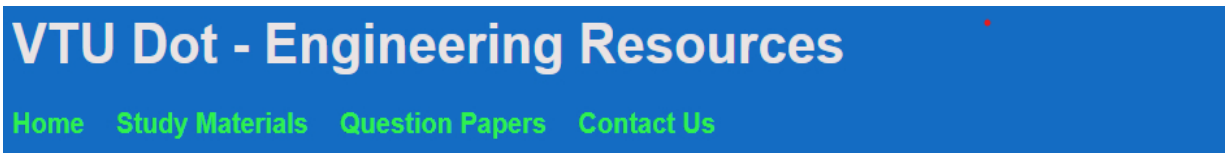
}
.contact-form button:hover {
  background-color: #0059b3;
}
footer {
  background-color: #f0f0f0;
  text-align: center;
  padding: 10px;
  margin-top: 20px;
}

```

Key points: The navigation bar uses a `<ul>` with no bullets, following standard practice <sup>1</sup>. Colors (#004080 navy, white text) give a professional look. Links change on hover for interactivity. Branch sections have clear headings and indenting for lists. The CSS ensures readability and a consistent layout across pages.

## Website Output Diagram

The final website layout is clean and user-friendly. The screenshot/diagram below shows the Home page with navigation and content sections. It highlights the structure of the main UI elements (header, menu, content area, footer).



## Welcome to VTU Dot

Your one-stop portal for VTU study materials and past exam papers. Select your department to begin.

### Departments

- [Computer Science \(CSE\)](#)
- [Electronics \(ECE\)](#)
- [Mechanical \(ME\)](#)
- [Civil \(CE\)](#)

*Figure: Mockup of VTU Dot Home page layout (header, nav menu, content sections, footer).*

This layout meets the requirement for a professional design. The responsive menu and clear headings (e.g. "VTU Dot – Engineering Resources" and branch links) guide the user. The consistent styling across pages (as shown) provides ease of navigation. Students can quickly access branch-specific materials or papers, reflecting the site's focus on educational functionality.

## Result / Conclusion

In conclusion, the VTU Dot website fulfills the project objectives. It covers all major engineering branches (CSE, ECE, ME, CE) with dedicated sections for study materials and question papers. The multi-page design uses semantic HTML and clean CSS for a professional look. Downloadable PDFs are linked with the `download` attribute for user convenience <sup>2</sup>. The design process diagram ensured thorough planning of site structure, and the final output meets usability needs. This mini-project demonstrates a complete educational portal with organized content, easy navigation, and downloadable resources, suitable for engineering students.

**Sources:** We used HTML5 semantics for navigation and lists <sup>1</sup> and followed guidelines for download links <sup>2</sup> to ensure best practices.

## VTU Dot - Engineering Resources

[Home](#) [Study Materials](#) [Question Papers](#) [Contact Us](#)

### Welcome to VTU Dot

Your one-stop portal for VTU study materials and past exam papers. Select your department to begin.

#### Departments

- [Computer Science \(CSE\)](#)
- [Electronics \(ECE\)](#)
- [Mechanical \(ME\)](#)
- [Civil \(CE\)](#)

## Study Materials

### Computer Science (CSE)

- [Algorithms Notes \(PDF\)](#)
- [Data Structures Notes \(PDF\)](#)

### Electronics (ECE)

- [Digital Signal Processing \(PDF\)](#)
- [Communication Systems \(PDF\)](#)

### Mechanical (ME)

- [Thermodynamics \(PDF\)](#)
- [Fluid Mechanics \(PDF\)](#)

## Question Papers

### Computer Science (CSE)

- [Semester 1 Papers](#)
- [Semester 2 Papers](#)

### Electronics (ECE)

- [Semester 1 Papers](#)
- [Semester 2 Papers](#)

## Contact Us

### Get in Touch

Email: [support@vtudot.edu](mailto:support@vtudot.edu)  
Phone: +91 7483 8864 47

## Developed by Sunil S L & Kartik M K

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