

## Web Programming Stream - Why Is This Topic Important?

	JS language	JS ecosystem	DOM	UI, UX	Browser apps	Data	HTTP	Architecture	Server	Host, deploy
<b>Level 2</b> WEB222 BTI225	Foundations, basics, types, functions, scope, objects, prototype, inheritance	Awareness of the history, and the standard	Foundations, basics, markup, HTML, document areas, events, modifying	Web app pattern basics, CSS foundations, layout, interaction pattern	HTML Forms, the basics, common app components, navigation, hyperlinks	JavaScript objects and collections, JSON, well-known internet media types	Awareness of the history, and the standard	Web client app structure, code assets	Awareness of the history, and a range of popular servers	Awareness of the history, and the current market state
	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
<b>Level 3</b> WEB322 BTI325	Closure, callback, debug	Libraries, frameworks, server apps	Render data (table)	CSS for components, Bootstrap, asynchrony	HTML Forms, get all, get one, add new, templates, interaction, XmlHttpRequest	Storage abstraction, ORM, storage engines, MySQL, MongoDB	Messages, URI, clients, requests, servers, responses	Web app architecture, OO, patterns, request-handling pipeline, security basics in a single app	Web apps and services defined, serving static resources, Node.js, Express.js, Handlebars	App hosting and deployment in the cloud
	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
<b>Level 4</b> WEB422 BTI425	Software testing	Libraries, frameworks, browser apps	Refine DOM modification to assist typical UI and UX needs	Asynchrony, common user stories and use cases, error-handling	HTML Forms, remaining typical use cases, Angular, MVW, SPA	All internet media types, content negotiation, object graphs, initial data, data updates	Caching, content negotiation, web API clients	Web scale, standards-based security, distributed app architecture	Web API architecture	Build and deploy at scale, software testing, continuous integration