

## Python Most important Built-in-Modules list

Module Name	Purpose	Key Methods
<b>math</b>	Mathematical functions and constants	<code>math.sqrt(x)</code> , <code>math.sin(x)</code> , <code>math.cos(x)</code> , <code>math.pi</code> , <code>math.e</code>
<b>random</b>	Generate random numbers and make random choices	<code>random.random()</code> , <code>random.randint(a, b)</code> , <code>random.choice(seq)</code> , <code>random.shuffle(seq)</code>
<b>os</b>	Interaction with the operating system	<code>os.getcwd()</code> , <code>os.listdir(path)</code> , <code>os.path.join(path, *paths)</code> , <code>os.path.exists(path)</code>
<b>sys</b>	Access to system-specific parameters and functions	<code>sys.argv</code> , <code>sys.platform</code> , <code>sys.exit(status)</code>
<b>datetime</b>	Work with dates, times, and timedeltas	<code>datetime.datetime.now()</code> , <code>datetime.date(year, month, day)</code> , <code>datetime.timedelta(days, seconds, microseconds, milliseconds, minutes, hours, weeks)</code>
<b>collections</b>	Specialized container datatypes	<code>collections.deque(iterable)</code> , <code>collections.Counter(iterable)</code> , <code>collections.defaultdict(default_factory)</code>
<b>json</b>	Encode and decode JSON	<code>json.dumps(obj)</code> , <code>json.loads(json_str)</code> , <code>json.dump(obj, file_obj)</code> , <code>json.load(file_obj)</code>
<b>re</b>	Regular expression operations	<code>re.search(pattern, string)</code> , <code>re.match(pattern, string)</code> , <code>re.findall(pattern, string)</code> , <code>re.sub(pattern, repl, string)</code>
<b>urllib</b>	Work with URLs and make HTTP requests	<code>urllib.request.urlopen(url)</code> , <code>urllib.request.urlretrieve(url, filename)</code> , <code>urllib.parse.urlencode(params)</code>
<b>argparse</b>	Parse command-line arguments and options	<code>argparse.ArgumentParser()</code> , <code>.add_argument()</code> , <code>.parse_args()</code>
<b>csv</b>	Read and write CSV files	<code>csv.reader(file_obj)</code> , <code>csv.writer(file_obj)</code> , <code>csv.DictReader(file_obj)</code> , <code>csv.DictWriter(file_obj, fieldnames)</code>
<b>pickle</b>	Object serialization and deserialization	<code>pickle.dump(obj, file_obj)</code> , <code>pickle.load(file_obj)</code>
<b>gzip</b>	Work with gzip-compressed files	<code>gzip.open(filename, mode)</code> , <code>gzip.compress(data)</code>
<b>sqlite3</b>	Interaction with SQLite databases	<code>sqlite3.connect(database)</code> , <code>connection.execute(sql)</code> , <code>connection.commit()</code> , <code>connection.close()</code>
<b>time</b>	Time-related functions	<code>time.time()</code> , <code>time.sleep(seconds)</code> , <code>time.localtime()</code> , <code>time.strftime(format)</code>
<b>itertools</b>	Tools for efficient iteration	<code>itertools.product(iterables, repeat)</code> , <code>itertools.permutations(iterable, r)</code> , <code>itertools.combinations(iterable, r)</code>
<b>functools</b>	Higher-order functions and callable objects	<code>functools.partial(func, *args, **keywords)</code> , <code>functools.reduce(func, iterable[, initializer])</code>
<b>os.path</b>	Functions for path manipulation	<code>os.path.join(path, *paths)</code> , <code>os.path.dirname(path)</code> , <code>os.path.basename(path)</code> , <code>os.path.exists(path)</code>