

## Biostatistics Summer Training

NTHRYS provides Biostatistics Summer Training for interested candidates at its Hyderabad facility, Telangana. Please refer below for more details including Fee structures, Eligibility, Protocols and Modules etc.,. Please do call / message / whatsapp for more details on 9014935156 [India - +91]

**Eligibility:** BSc / BTech / MSc / MTech / MPhil / PhD in any Life Sciences studying or completed students

### Protocols / Techniques Covered

Topic (Depending upon the selected duration, topics will be allocated with specific number of hours)	Practicals	Tools
Biostatistics Introduction <ol style="list-style-type: none"> <li>1. Types of Variables (Quantitative Vs Qualitative, Dependent Vs Independent)</li> <li>2. Study Designs (Observational, Experimental, Others)</li> <li>3. Tabulation &amp; Graphs (Function, Rules &amp; Basis of classification)               <ol style="list-style-type: none"> <li>1. Class Intervals &amp; types</li> <li>2. Cumulative frequency distributions</li> <li>3. Bivariant Frequency Distribution</li> </ol> </li> <li>4. Tabulation               <ol style="list-style-type: none"> <li>1. Parts of Table</li> <li>2. Original Vs Desired Table, Simple Vs Complex Table</li> <li>3. High Order Table</li> </ol> </li> <li>5. Graphs               <ol style="list-style-type: none"> <li>1. Types of Graphs                   <ol style="list-style-type: none"> <li>1. One Dimensional Graphs</li> <li>2. Two Dimensional</li> <li>3. Three Dimensional</li> <li>4. Picto Grams</li> <li>5. Cartograms</li> </ol> </li> <li>6. Others                   <ol style="list-style-type: none"> <li>1. Histogram</li> <li>2. Frequency Polygon(Direct)</li> <li>3. Ogive cumulative frequency curve</li> </ol> </li> </ol> </li> </ol>		

<p>6. Averages (Mean, Median, Mode)</p> <ol style="list-style-type: none"> <li>1. Mean (Arithmetic Mean, Weighted Arithmetic Mean etc.)</li> <li>2. Median             <ol style="list-style-type: none"> <li>1. Cumulative Frequency</li> <li>2. Partition Values (Quartiles, Deciles, Percentiles)</li> </ol> </li> <li>3. Mode             <ol style="list-style-type: none"> <li>1. Continuous frequency distribution</li> <li>2. Inspection Method, Analysis Method</li> </ol> </li> <li>4. Connection (Symmetric Distribution, Skewed left, Skewed Right)</li> <li>5. Dispersion or Measure of Variation</li> <li>6. Range &gt;&gt; Quartile Deviation &gt;&gt;Average or Mean Deviation &gt;&gt; Standard Deviation</li> <li>7. Range &gt;&gt; Absolute &amp; Relative</li> <li>8. Mean Deviation             <ol style="list-style-type: none"> <li>1. Mean Deviation from Arithmetic Mean</li> <li>2. Mean Deviation from Median</li> <li>3. Mean Deviation from Mode</li> </ol> </li> <li>9. Standard Deviation</li> <li>10. Coefficient of Variation</li> <li>11. Combined Standard Deviation</li> </ol>	<p>Yes</p>	<p>Manual, Excel, SPSS (Optional)</p>
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<p>7. Statistical Inference              8. Hypothesis Testing              1. What is Hypothesis? Characteristics of Hypothesis.              2. Types of Hypithesis              1. Null Hypothesis              2. Alternate Hypothesis              3. Errors              1. Type I Errors              2. Type II Errors              4. Level of Significance              5. Two tailed and One Tailed Tests              6. Testing the Hypothesis              7. Critical Value &amp; Decision Value              8. Right Tailed &amp; Left Tailed Tests              9. Procedure for Hypothesis Testing              1. Making a formal statement              2. Selecting a Significance level              3. Deciding the distribution to use              4. Selecting a random sample and computing an appropriate vale              5. Critical value              6. Decision Value              7. Sampling (Sampling Distribution)              8. Student t Distribution              9. Degree of Freedom              10. Hypothesis testing for Mean &amp; difference between Means</p>	<p>Yes</p>	<p>Manual, Excel, SPSS (Optional)</p>
<p>9. Parametric &amp; Nonparametric Tests              1. Equivalent Tests              1. Parametric Tests              1. Independent Sample t test              2. Paired Sample t test              3. One Way Analysis of Variance (ANOVA)              4. One way repeated measures Analysis of Variance              2. Non Parametric Tests              1. Mann-Whitney Test              2. Wilcoxon signed Rank test              3. Kruskal Wallis test              4. Friedman's ANOVA              2. Z and T Distribution              3. Chi Square Test              4. Conducting Chi-Square Analysis              5. Independence of Attributes              6. Range of R              7. Spearman Rank Correlation              8. Regression (Linear Regression equation)</p>	<p>Yes</p>	<p>Manual, Excel, SPSS (optional)</p>

Guidance will be given to the candidates (Durations above 10 days) who are interested to do a Minor Project (Optional - with no additional fee) related to the above module. Additional Certificate will be given to the same upon completion.

### Biostatistics Summer Training

Fee details in Rs per student					
Fee	5 Days	10 Days	20 days	1 Month	45 Days
Individual	12400	13000	16500	20400	24100
Group 2 - 4	11800	11800	15700	19500	23000
Group 5 - 7	11700	11700	15500	19300	22800
Group 8 - 10	11600	11600	15400	19100	22600