

Days	Name	Durations	Category	Main Category
1	Introduction to National Center of Biotechnology Information (NCBI)	18:01	NCBI	Bioinformatics Databases
1	Sequence Analysis	17:59	NCBI	Bioinformatics Databases
2	Sequence Retrieval from NCBI	16:16	NCBI	Bioinformatics Databases
2	PubMed Central & ENTREZ	11:06	NCBI	Bioinformatics Databases
3	FASTA (Sequence Format)	6:13	Sequence Format	Bioinformatics File Formats
3	GenBank: Nucleotide Database on NCBI	6:50	NCBI	Bioinformatics Databases
4	GenBank (Sequence Annotation Format)	7:08	Sequence Format	Bioinformatics File Formats
4	FASTA vs. GenBank	18:26	NCBI	Bioinformatics Databases
5	Gene Database: A Comprehensive Gene Database	30:21:00	NCBI	Bioinformatics Databases
5	NCBI Genomes & NCBI Assembly: Retrieval of Genomes	36:14:00	NCBI	Bioinformatics Databases
6	Gene File Format/Gene Transfer Format	11:06	Sequence Format	Bioinformatics File Formats

Days	Name	Durations	Category	Main Category
6	BED (Gene Structure Format)	4:26	Sequence Format	Bioinformatics File Formats
7	RefSeq Database: Retrieval of Single Reference Sequences	11:15	NCBI	Bioinformatics Databases
7	BLAST Database Searching	25:36:00	NCBI	Bioinformatics Databases
8	Introduction to Molecular Modeling Database (MMDB)	8:06	NCBI	Protein Databases & Analysis
8	Introduction to UCSC Genome Browser & SARS-CoV-2 Viral Genome	13:40	UCSC	Bioinformatics Databases
9	Retrieve an Entire Genome & Retrieval of SARS-CoV-2 Viral Genome	9:40	UCSC	Bioinformatics Databases
9	Retrieval of Genomic Data & Annotation of SARS-CoV-2 Viral Genome	5:29	UCSC	Bioinformatics Databases
10	Introduction to UniProt	9:56	UniProt	Protein Databases & Analysis
10	UniProtKB & Protein Analysis	39:29:00	UniProt	Protein Databases & Analysis
11	Introduction to Protein Data Bank (PDB)	6:44	PDB	Protein Databases & Analysis
11	Accurately Searching for a Protein Structure on PDB & Protein Analysis	13:55	PDB	Protein Databases & Analysis

Days	Name	Durations	Category	Main Category
12	Introduction to ENSEMBL	7:49	ENSEMBL	Bioinformatics Databases
12	Retrieval of a Gene-Protein-Chromosomal Region	18:01	ENSEMBL	Bioinformatics Databases
13	Introduction to InterPro	4:10	InterPro	Protein Databases & Analysis
13	InterPro - Protein Family Classification and Analysis	14:35	InterPro	Protein Databases & Analysis
14	Introducton to Phytozome	9:38	Phytozome	Bioinformatics Databases
14	Interpret Plant Genome Records	9:06	Phytozome	Bioinformatics Databases
15	Download an Entire Plant Genome & Proteome	26:41:00	Phytozome	Bioinformatics Databases
15	EMBOSS NEEDLE: Global Alignment of Sequences	20:02	Pairwise Sequence Alignment & Analysis	Sequence Alignment & Analysis
16	EMBOSS Water	9:10	Pairwise Sequence Alignment & Analysis	Sequence Alignment & Analysis
16	Clustal Omega: Most Reliable Multiple Sequence Alignment Tool	19:18	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
17	Clustal Omega Alignment Format	5:07	Alignment Format	Bioinformatics File Formats

Days	Name	Durations	Category	Main Category
17	Jalview	13:42	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
18	MEGA - Multiple Sequence Alignment	4:23	Multiple Sequence Alignment & Analysis	Sequence Alignment & Analysis
18	MEGA (Alignment Format)	5:32	Alignment Format	Bioinformatics File Formats
19	iTOL: Creating Publishable Phylogenetic Figures	13:42	Phylogenetic Tree Building & Visualization	Phylogenetic Analysis
19	Quick2D	4:33	Secondary Structure Prediction	Secondary Structure Prediction
20	Jpred: Prediction Secondary Structure of the Proteins	4:54	Secondary Structure Prediction	Secondary Structure Prediction
20	HMMER - Hidden Markov Model Based Protein Profiles Database	13:16	Protein Analysis	Protein Databases & Analysis
21	SignalP: Prediction of Signal Peptides	7:57	Protein Analysis	Protein Databases & Analysis
21	TargetP: Prediction of Protein Localization	9:21	Protein Analysis	Protein Databases & Analysis
22	Gene Structure Display Server 2.0	8:35	Genomics Tools	Genomics Tools