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***Автор-составитель***

д-р техн. наук, профессор ***В. Г. Копченков***

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Пособие составлено в соответствии с требованиями образовательного стандарта высшего профессионального образования и включает лабораторные и практические работы, в которых основное внимание уделено экспериментальному изучению деталей и узлов общего назначения, а также основ расчета и проектирования.

Предназначено для студентов, обучающихся по направлению подготовки 21.03.01 – Нефтегазовое дело, квалификация выпускника – бакалавр.

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***Рецензенты:***

канд. техн. наук, доцент ***В. Г. Терещенко***,  
канд. техн. наук, профессор ***А. В. Орлянский*** (СГАУ)

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## INTRODUCTION

Pursuant to the State educational standard, laboratory works in "Machines parts " are be performed by students majoring in 21.03.01 "Oil and Gas Engineering " in the 4th semester. The number of labs and the time allotted for their implementation is set forth in the applicable work programs.

The Guidelines focus on the fundamentals of designing machine parts. It will allow students to see real, typical elements and obtain appropriate skills for their design.

The purpose of the practical classes are consolidate, deepen and generalize the theoretical knowledge gained by students in the process of listening to the lecture course and independent study of specific topics.

Students are allowed to perform work only after a safety briefing, with entering relevant data and signing a Safety Log. The experimental part of the laboratory work is conducted under the guidance of a teacher and staff of the sub-Department responsible for safety.

Upon completing an experiment, students file a report in accordance with the guidelines requirements.

A laboratory work and practical classes is defended orally, based on the report. Approved reports on each work remain with the students until they complete all laboratory works and separately practical trainings. At the end of the semester all reports are filed in the journal of laboratory work and separately practical trainings based on which credits are obtained.

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